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SCS ENGINEERS

Results of the 4th Quarter 2004 Groundwater Monitoring and Sampling Event

**John Riddell
4660 Hessel Road
Sebastopol, California
(Assessor's Parcel No. 062-112-005)**

File Number 01203317.00

Prepared by:

**SCS Engineers
3645 Westwind Boulevard
Santa Rosa, California 95403**

To:

**Ms. Beth Lamb
North Coast Regional Water Quality Control Board
5550 Skylane Boulevard, Suite A
Santa Rosa, California 95403**

April 7, 2005

LIMITATIONS/DISCLAIMER

This report has been prepared for John Riddell with specific application to a Quarterly Monitoring event for the property located at 4660 Hessel Road, Sebastopol, California. Field activities and sampling were conducted in accordance with the care and skill generally exercised by reputable professionals, under similar circumstances, in this or similar localities. No other warranty, either expressed or implied, is made as to the professional advice presented herein.

Changes in site use and conditions may occur due to variations in rainfall, temperature, water usage, or other factors. Additional information which was not available to the consultant at the time of this quarterly monitoring event or changes which may occur on the site or in the surrounding area may result in modification to the site that would impact the summary presented herein. This report is not a legal opinion.

We trust this report provides the information you require at this time and we appreciate the opportunity to work with you on this project. If you require any additional information, or have any questions, please do not hesitate to contact SCS at (707) 546-9461.

LCR

Kevin L. Coker REA #7887
Ca registration fees paid through 06/30/05

4/10/05

Date



6 APRIL, 2005

Stephen Knuttel
Stephen Knuttel PG #7674
CA registration fees paid through 07/31/05

Date

Introduction

SCS Engineers (SCS) is pleased to present the results of the 4th quarter 2004 groundwater monitoring and sampling event for 4660 Hessel Road, Sebastopol, California (Assessor's Parcel No. 062-112-005). A summary of historical site investigative activities is presented in previous reports (GeoPacific 1996; PNEG¹ 1996b, 1997, 1999a, 1999b, 2002b; SCS 2004b). The site is located as shown on the attached Site Location Map, Figure 1. General site features are as shown on the attached Site Plans, Figures 2A and 2B.

Groundwater Monitoring

The 4th quarter 2004 groundwater monitoring and sampling event was performed on January 4, 2005. This delay was caused due to a request from the adjacent property owner (Ms. Giuliani) to reschedule the originally scheduled November sampling event due to the Thanksgiving and Christmas Holiday period, therefore, SCS was not able to perform the 4th quarter sampling event until early January 2005. The next quarterly monitoring event (1st quarter 2005) will be scheduled for late March 2005.

Pursuant to a letter from the NCRWQCB (NCRWQCB, 2004), MW-1, MW-2, MW-7, MW-8, MW-9 and MW-10 will be placed on a semi-annual sampling program which will coincide with semi-annual sampling of domestic wells DW-1, DW-MB, and DW-4. These changes will be implemented during the next sampling event at the site (March 2005).

Depth to groundwater measurements were collected from each of the project monitoring wells on January 4, 2005. Depth to groundwater measurements in the shallow wells ranged from surface to approximately 4 feet below ground surface (bgs). Similar groundwater measurements were also encountered in the deep wells. Note that artesian conditions were encountered in shallow wells MW-4 and MW-14 and deep well MW-3. The depth to groundwater measurements and casing elevations were used to calculate groundwater flow direction and gradient for both the shallow and the deep wells. Casing and groundwater elevations are reported in feet relative to mean sea level. Depth to groundwater measurements are reported in feet. The groundwater flow direction from the shallower wells was interpolated to be N-NW at a gradient of 0.05. The groundwater flow direction from the deeper wells was interpolated to be northerly at a gradient of 0.03. Historical and current groundwater elevation data are presented in Tables 1 and 2, and on Figures 2A and 2B. Groundwater flow direction in the shallow wells at the site has been predominantly north to northwest at and around the site, at gradients ranging from 0.01 to 0.04, and in the deep wells has been predominantly north to northeast at gradients ranging from 0.01 to 0.05.

¹ Pacific Northwest EnviroNet Group, Inc. (PNEG) became part of SCS in July 2003.

Groundwater Sampling

After depth to groundwater measurements were collected, each of the wells was checked for the presence of free product by both subjective observation and using an oil/water interface probe. No free product was reported during this monitoring event. Each of the project monitoring wells was then purged of approximately three wetted well casing volumes of groundwater or 5 gallons, whichever was greater, or until it went dry, using a submersible pump. However the creek standpipe was not purged prior to sample collection. Field measurements were collected for temperature, pH, conductivity, turbidity, and dissolved oxygen during purging to help demonstrate that fresh groundwater was entering the well casing for sampling. Each well was allowed to recover prior to sampling. The groundwater samples were obtained using a separate disposable bailer for each well and were transferred into the appropriate containers supplied by the laboratory for analysis. The groundwater samples were labeled, stored under refrigerated conditions, and transported under Chain-of-Custody documentation to Analytical Sciences (AS) in Petaluma CA. AS is a California Department of Health Services certified laboratory for the analyses requested. Copies of AS current certifications have been reviewed and are on file. All samples were collected following SCS' Standard Soil and Water Sampling Procedures and QA/QC Protocol. Information obtained during sampling was recorded on field sampling forms from which Well Purge Records were prepared, copies of which are presented in Appendix A. Purge water generated from well sampling is stored at the site in 55-gallon UN/DOT-approved drums, pending disposal.

Domestic Well Sampling

Domestic well numbers identified as DW-1, DW-3, DW-4, DW-HD, DW-HD2, and DW-4615 corresponding to the domestic wells located at 4660, 4660B, 4620, and 4615 Hessel Road (Figure 2A) have been sampled on semi-annual schedules since February 2001. Sampling of DW-4615 is being performed on a quarterly basis (NCRWQCB, 2002). Each of the subject domestic wells was sampled on January 4 and 5, 2005. Copies of the analytical reports are presented in Appendix B, recent and historical domestic well sample analytical results are summarized in Table 3.

Stand Pipe Sampling

A sample was collected from the stand pipe on January 5, 2005 using a disposable bailer. After which the sample was handled in the same manner as were the monitoring well samples, detailed previously. The sample was below the laboratory report detection limit (RDL) for all target analytes. Recent and historical standpipe sample results are summarized in Table 4.

Stream Sampling

Two water samples were collected from the stream which flows northeasterly along the western side of the investigation area during a previous sampling event at the site in June 2004 (SCS, 2004d). Stream samples were not collected from the stream in September 2004 or January 2005. The

samples collected from the stream in June 2004 were below the RDL for all target analytes. The samples were collected by lowering a clean disposable bailer into the flowing water. The samples were then transferred into the appropriate laboratory-supplied containers and handled in a similar manner as the monitoring well groundwater samples. SCS requests further clarification from the NCRWQCB prior to the next quarterly sampling event with regard to the stream sampling locations and frequency. Recent and historical stream sample results are summarized in Table 4.

Laboratory Analysis

The groundwater samples collected from the monitoring wells, and the stand pipe were analyzed for TPH-g by EPA Method 5030/8015M, and for volatile organic compounds (VOCs) by EPA Method 8260B full scan reporting all peaks. The samples from the domestic wells were analyzed for similar parameters with the exception or the TPH-g analysis.

Groundwater Analytical Results

Groundwater analytical results for MW-1 through MW-20 and the stand pipe from the recent sampling event on January 4 and 5, 2005 are summarized in Table 3 and contoured on Figures 3A through 5B. Historical and recent groundwater analytical results are presented in Table 3, and plotted on time versus concentration diagrams, Diagrams A through F. A copy of the laboratory analytical report is also presented in Appendix B.

Discussion

The subject monitoring event represents the twenty second consecutive quarterly sampling of MW-1 through MW-6, the seventeenth consecutive quarterly sampling of MW-7D through MW-16, and the fourth consecutive sampling event for wells MW-17D, MW-18, MW-19D, and MW-20 (one complete hydrologic cycle). TPH-g concentrations continue to be detected in both the deep and shallow wells at the site, with MW-4, MW-12, MW-15D, and MW-20 being the most heavily impacted (Figures 3A and 3B); although a general decrease in TPH-g concentrations appears to be occurring over time in these wells as indicated on the Diagrams A and B. Based on the limited number of monitoring events to date for the most recently installed well MW-20, there is insufficient data to access whether or not this declining trend can be applied to MW-20. A review of Diagrams C and D indicates that BTEX concentrations in the project wells are consistent with the TPH-g results, with MW-4, MW-12, MW-15D, and MW-20 appearing to be the most heavily impacted wells (Figures 4A and 4B), and again, a general decline in contaminant concentrations appears to be occurring over time; although the contaminant concentrations in MW-15D appear to be of a more general stable trend than those in the other wells at the site.

As indicated on isoconcentration maps, Figures 5A and 5B, and consistent with previous results, the volatile organic compound (VOC), 1,2-dichloroethane² (EDC) appears to be impacting groundwater primarily in the vicinity of MW-4, MW-15D, MW-16, and MW-13D.

Based on consistent non-detect (ND) results for the samples collected from the stream and the standpipe, the groundwater impact beneath the site and vicinity does not appear to be impacting the nearby stream. The measured water levels in the shallow monitoring wells and the stand pipe indicate that the shallow groundwater beneath the site was generally flowing towards the stream, i.e. the stream is a gaining stream. The stream flows in a northeasterly direction towards Laguna de Santa Rosa.

Project Update

A meeting was held on June 2, 2004 between the NCRWQCB and SCS to discuss an addendum to the April 30, 2004 Work Plan which had been submitted to the NCRWQCB. Based on the results of the meeting and subsequent conversations with the NCRWQCB, SCS submitted a proposal for 8 deep borings to be drilled at site and site vicinity locations (SCS, 2004e) which the NCORWQCB approved (NCRWQCB, 2004). SCS completed the drilling and sampling of the 8 borings between January and February of 2005. Completion of the additional borings at the site is currently scheduled for the week of February 10, 2005. A summary report of findings will be prepared and submitted within the near future.

Attachments **File No. 01203317.00**

- Figure 1: Site Location Map
- Figure 2A: Site Plan Groundwater Flow Direction and Gradient - Shallow Wells for 01/04/05
- Figure 2B: Site Plan Groundwater Flow Direction and Gradient - Deep Wells for 01/04/05
- Figure 3A: Isoconcentration Map - TPH-g in Shallow Wells – January 2005
- Figure 3B: Isoconcentration Map - TPH-g in Deep Wells – January 2005
- Figure 4A: Isoconcentration Map - ΣBTEX in Shallow Wells – January 2005
- Figure 4B: Isoconcentration Map - ΣBTEX in Deep Wells – January 2005
- Figure 5A: Isoconcentration Map - EDC in Shallow Wells – January 2005
- Figure 5B: Isoconcentration Map - EDC in Deep Wells – January 2005

Key to Diagrams and Tables

- Diagram A: TPH-g & Groundwater Elevation vs Time - Shallow Wells
- Diagram B: TPH-g & Groundwater Elevation vs Time - Deep Wells
- Diagram C: ΣBTEX & Groundwater Elevation vs Time - Shallow Wells

² 1,2-dichloroethane or Ethylene dichloride (EDC) has also been referred to as 1,2-DCA in previous reports.

Ms. Beth Lamb

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- Diagram D: ΣBTEX & Groundwater Elevation vs Time - Deep Wells
Diagram E: EDC & Groundwater Elevation vs Time - Shallow Wells
Diagram F: EDC & Groundwater Elevation vs Time - Deep Wells
Table 1: Groundwater Flow Direction and Gradient for Shallow Wells
Table 2: Groundwater Flow Direction and Gradient for Deep Wells
Table 3: Domestic Well Analytical Results
Table 4: Monitoring Well Analytical Results

Appendix A

Well Purge Records, dated January 4 and 5, 2005

Appendix B

- Analytical Sciences report #5010503, dated January 18, 2005
Analytical Sciences report #5010504, dated January 18, 2005
Analytical Sciences report #5010505, dated January 18, 2005
Analytical Sciences report #5010506, dated January 18, 2005
Analytical Sciences report #5010507, dated January 18, 2005
Analytical Sciences report #5010508, dated January 18, 2005
Analytical Sciences report #5010509, dated January 18, 2005

References

File No. 01203317.00

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NCRWQCB, 2002. Regulatory Correspondence from B. Lamb to J. Riddell, August 20.
NCRWQCB, 2004. Regulatory Correspondence from B. Lamb to J. Riddell, September 13.
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PNEG, 1996b. Report of Soil Investigation at 4660 Hessel Road, Sebastopol, California, May 16.
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PNEG, 1999b. Report of Investigation at 4660 Hessel Road, Sebastopol, California, August 31.
PNEG, 1999c. Limited Work Plan for 4660 Hessel Road, Sebastopol, California, October 25.
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PNEG, 2000a. Report on the January 2000 Quarterly Monitoring at 4660 Hessel Road, Sebastopol, California, March 1.
PNEG, 2000b. Feasibility Study to Remediate Petroleum Hydrocarbons in the Soil and Groundwater at 4660 Hessel Road, Sebastopol, California, April 28.
PNEG, 2000c. Results of the 2nd Quarter 2000 Monitoring Event and Domestic Well Sampling at 4660 Hessel Road, Sebastopol, California, July 11.
PNEG, 2000d. Results of the 3rd Quarter 2000 Monitoring Event and Domestic Well Sampling at 4660 Hessel Road, Sebastopol, California, September 5.

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April 7, 2005

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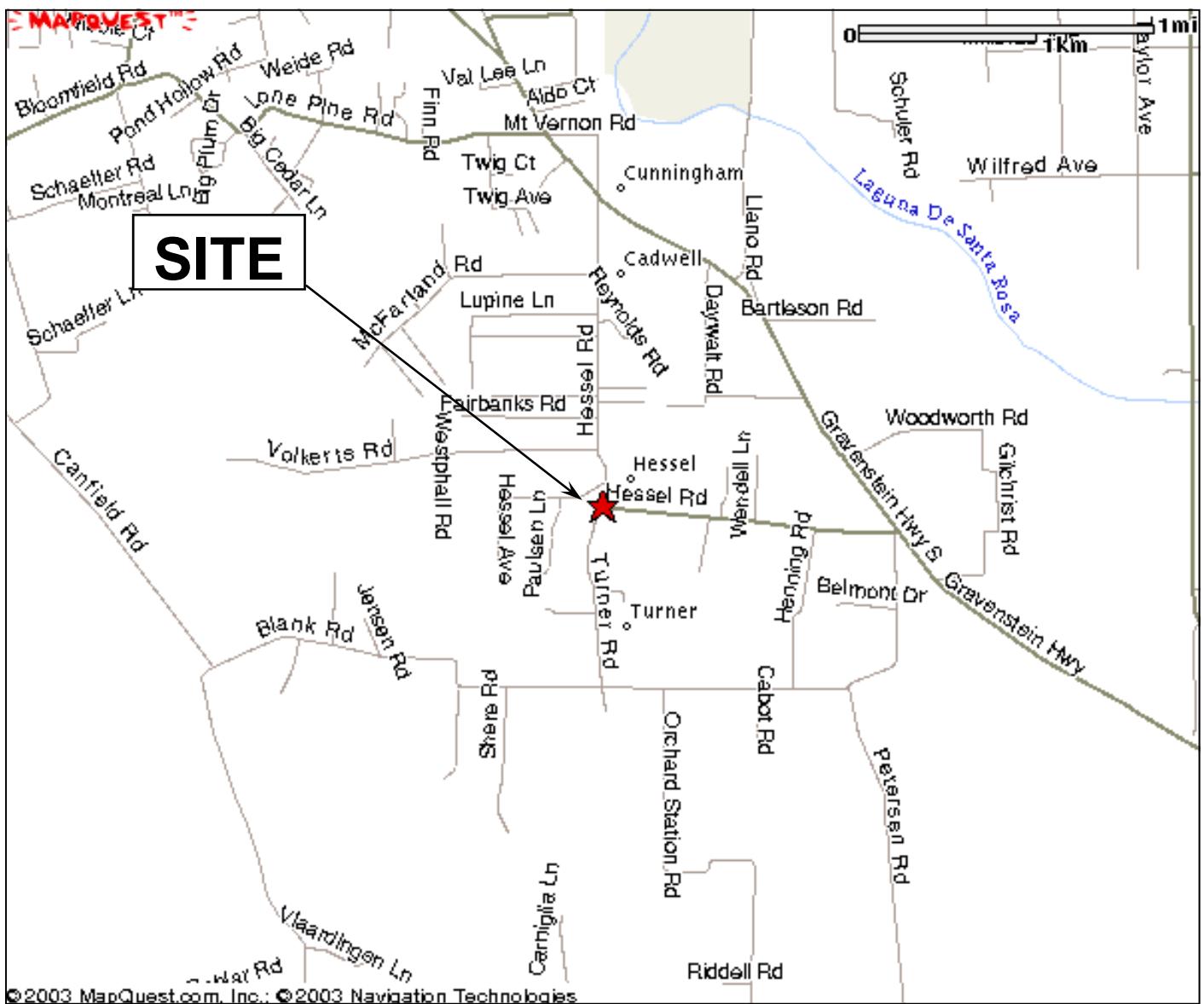
- PNEG, 2000c. Report of Investigation, 4th Quarter 2000 Monitoring Event with Domestic Well Sampling, and Interim Remediation Plan at 4660 Hessel Road, Sebastopol, California, December 29.
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- PNEG, 2001b. Work Plan for 4660 Hessel Road, Sebastopol, California, July 13.
- PNEG, 2001c. Results of the 2nd Quarter 2001 Monitoring Event and Domestic Well Sampling Event at 4660 Hessel Road, Sebastopol, California, July 30.
- PNEG, 2001d. Results of the 3rd Quarter 2001 Groundwater Monitoring and Domestic Well Sampling Event at 4660 Hessel Road, Sebastopol, California, October 17.
- PNEG, 2002a. Results of the 4th Quarter 2001 Groundwater Monitoring and Sampling Event at 4660 Hessel Road, Sebastopol, California, January 14.
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- PNEG, 2002c. Results of the 1st Quarter 2002 Groundwater Monitoring and Sampling Event at 4660 Hessel Road, Sebastopol, California, May 15.
- PNEG, 2002d. Results of the 2nd Quarter 2002 Groundwater Monitoring and Sampling Event at 4660 Hessel Road, Sebastopol, California, July 18.
- PNEG, 2002e. Results of the 3rd Quarter 2002 Groundwater Monitoring and Sampling Event at 4660 Hessel Road, Sebastopol, California, September 24.
- PNEG, 2002f. Work Plan to Study the Surface Water-Groundwater Interaction at 4660 Hessel Road, Sebastopol, California , December 12.
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- PNEG, 2003c. Results of the 1st Quarter 2003 Groundwater Monitoring and Sampling Event at 4660 Hessel Road, Sebastopol, California, April 24.
- PNEG, 2003d. Results of the 2nd Quarter 2003 Groundwater Monitoring and Sampling Event at 4660 Hessel Road, Sebastopol, California, July 10.
- SCS, 2003a. Results of the 3rd Quarter 2003 Groundwater Monitoring and Sampling Event at 4660 Hessel Road, Sebastopol, California, October 8.
- SCS, 2004a. Results of the 4th Quarter 2003 Groundwater Monitoring and Sampling Event at 4660 Hessel Road, Sebastopol, California, January 12.
- SCS, 2004b. Results of Additional Subsurface Investigation and Work Plan for Additional Subsurface Investigation at 4660 Hessel Road, Sebastopol, California, April 30.
- SCS, 2004c. Work Plan for Additional Subsurface Investigation at 4660 Hessel Road, Sebastopol, California, July 20.
- SCS, 2004d. Results of the 2nd Quarter 2004 Groundwater Monitoring and Sampling Event at 4660 Hessel Road, Sebastopol, California, August 10.
- SCS, 2004e. Work Plan Addendum, September 2.
- SCS, 2004f. Results of the 3rd Quarter 2004 Groundwater Monitoring and Sampling Event at 4660 Hessel Road, Sebastopol, California, November 15.

Distribution List
File No. 01203317.00

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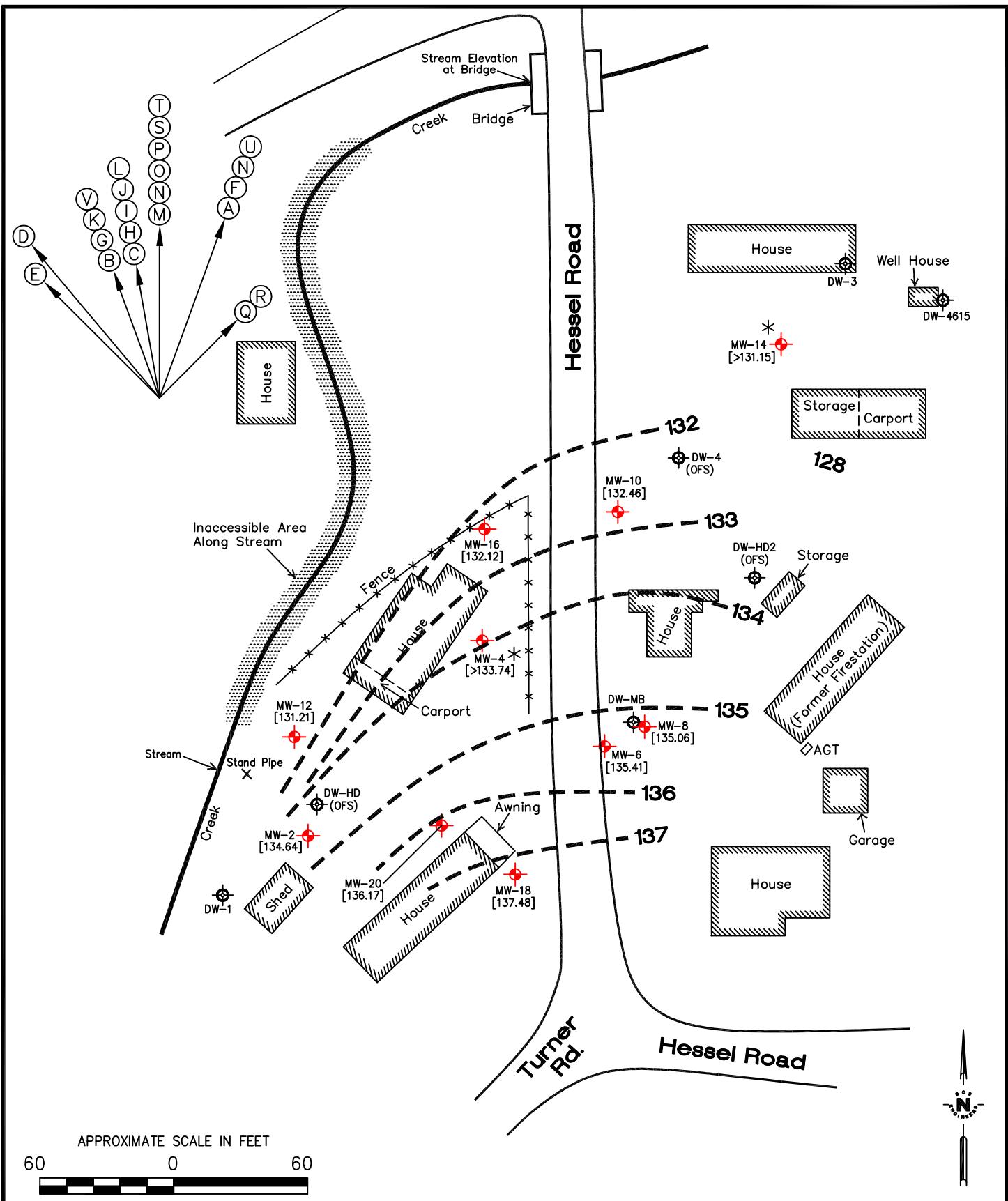
SITE LOCATION MAP

John Riddell
4660 Hessel Road
Sebastopol, California

APPROX. SCALE

FIGURE

1



GROUNDWATER FLOW LEGEND

Estimated Groundwater Gradient Direction Gradient Contour (Interval = 1.0 ft)

Identifier Tag Date Est Flow Direction Gradient Slope

(A) 7/12/99 N20°E i = 0.02

(B) 10/20/99 N20°W i = 0.04

(C) 1/11/00 N10°W i = 0.02

(D) 4/18/00 N40°W i = 0.04

(E) 7/20/00 N45°W i = 0.02

(F) 11/27/00 NNE i = 0.025

(G) 2/28/01 N20°W i = 0.02

(H) 5/29/01 N10°W i = 0.03

(I) 8/22/01 N10°W i = 0.02

(J) 11/26/01 N10°W i = 0.02

(K) 2/25/02 N20°W i = 0.03

(L) 5/29/02 Northerly i = 0.02

(M) 8/26/02 Northerly i = 0.01

(N) 11/19/02 N-NE i = 0.02

* (O) 2/18/03 Northerly i = 0.02

(P) 5/14/03 Northerly i = 0.02

(Q) 8/20/03 North-easterly i = 0.01

(R) 11/20/03 North-easterly i = 0.02

(S) 3/2/04 Northerly i = 0.03

(T) 6/7/04 Northerly i = 0.03

(U) 9/2/04 N-NE i = 0.03

(V) 1/4/05 NNW i = 0.05

Water Supply Well

Monitoring Well Location

DW = Domestic Well

HD = Hand Dug

OFS = Out of Service

NOTE: Drillings denoted in red used to determine flow direction and gradient

* Artesian conditions
(groundwater level at top of well casing)

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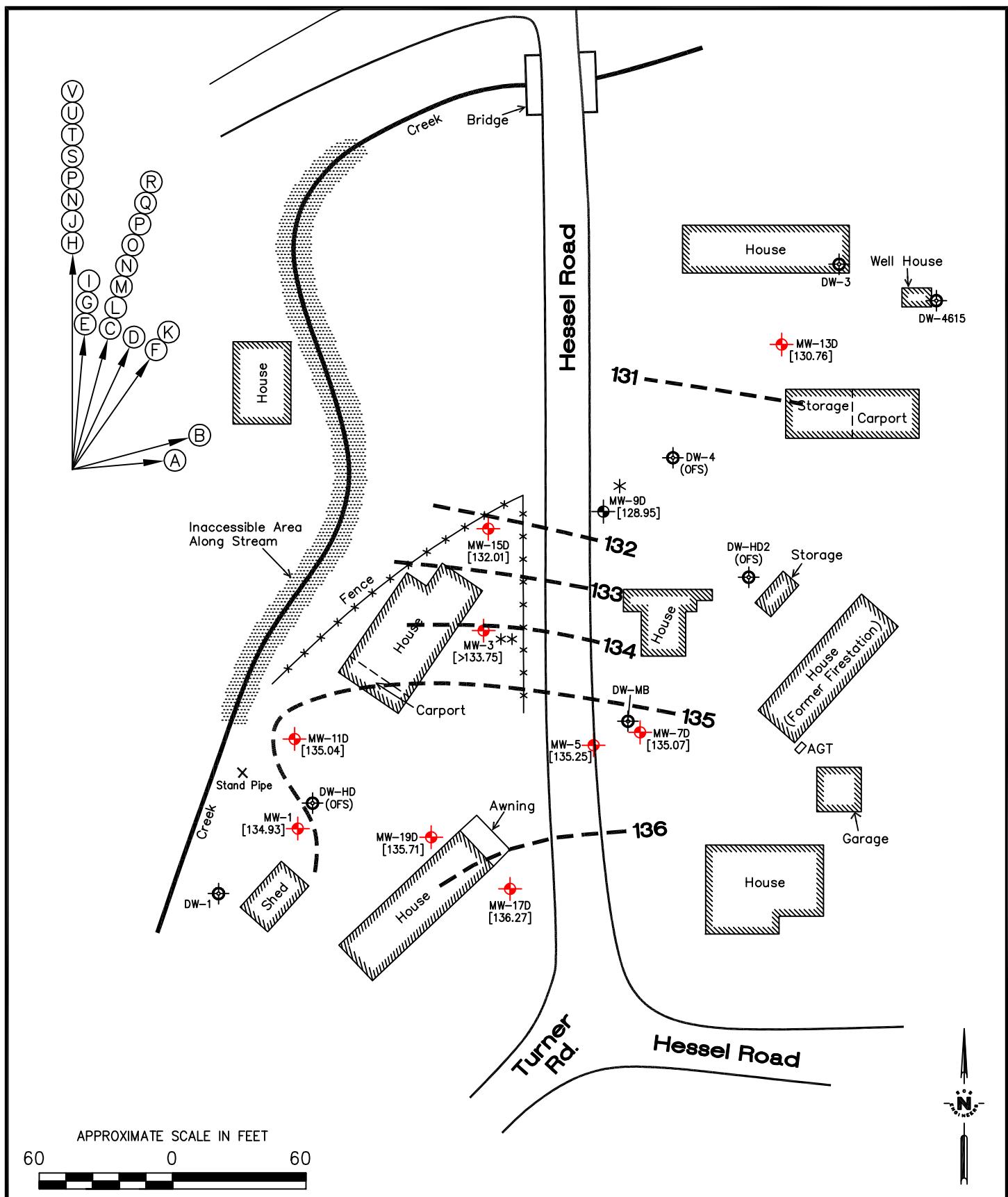
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PROJ. NO.: 3317.00 DWN. BY: ALP ACAD FILE: 3317.00-GW.SV-3432

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PROJECT TITLE: JOHN RIDDELL 4660 HESSEL ROAD SEBASTOPOL, CALIFORNIA	FIGURE NO.: 2A 2 OF 2



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DATE: 1/4/05 CHK. BY: APP. BY: GSJ

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PROJECT TITLE: JOHN RIDDELL 4660 HESSEL ROAD SEBASTOPOL, CALIFORNIA	FIGURE NO.: 2B 1 OF 2

GROUNDWATER FLOW LEGEND

- Water Supply Well
- Monitoring Well Location

DW = Domestic Well

HD = Hand Dug

OFS = Out of Service

NOTE: Drillings denoted in red used to determine flow direction and gradient

- * MW-9D not used to determine GW Flow Direction & Gradient.

* Artesian conditions
(groundwater level at top
of well casing)



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DATE:	1/4/05	CHR. BY:	APP. BY:	GSJ
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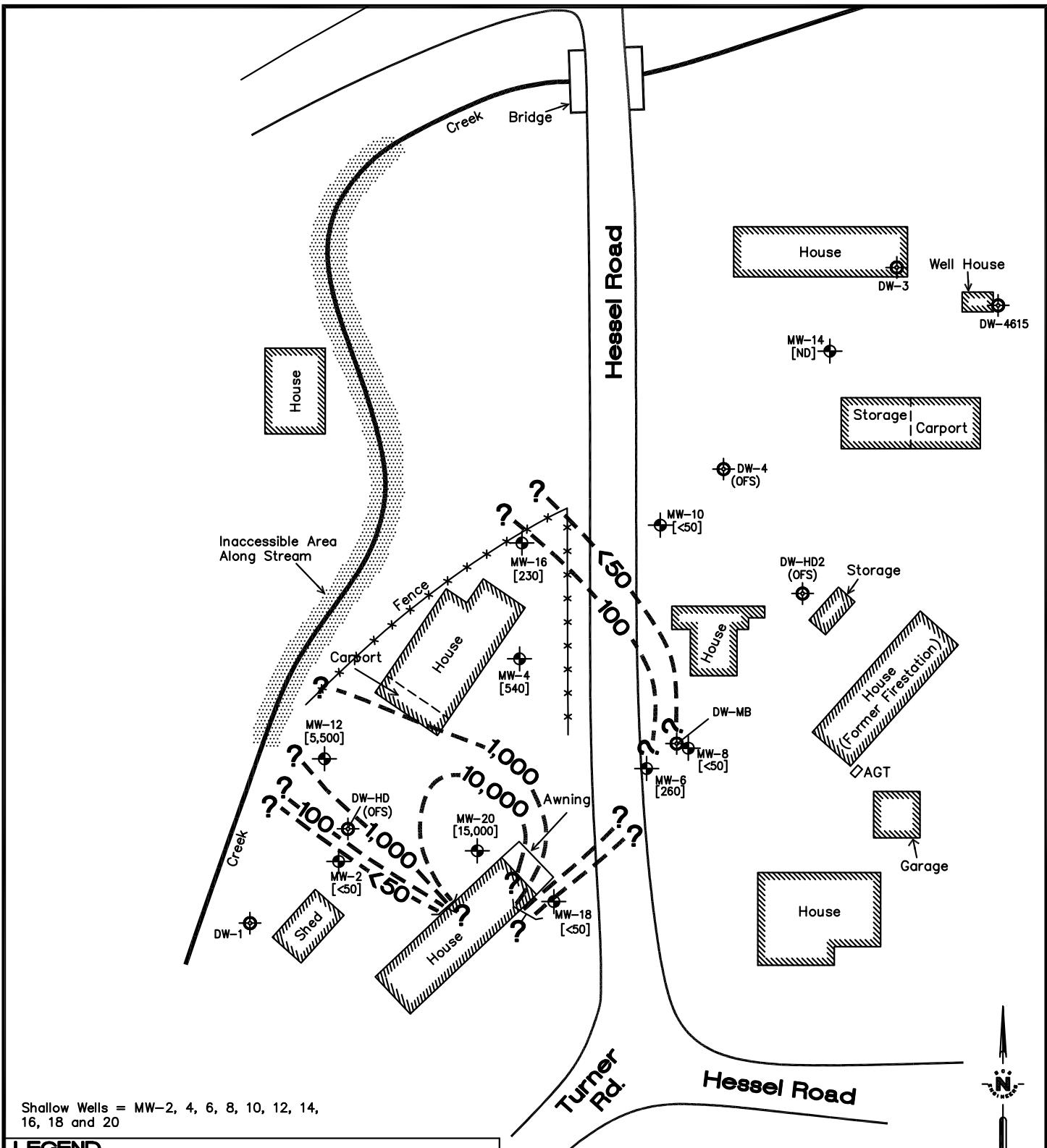
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PROJECT TITLE:

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FIGURE NO.:

2B
2 OF 2



Shallow Wells = MW-2, 4, 6, 8, 10, 12, 14,
16, 18 and 20

LEGEND

Monitoring Well Location	Water Supply Well
Isoconcentration Line	DW = Domestic Well
TPH-g, ug/L	HD = Hand Dug
	OFS = Out of Service

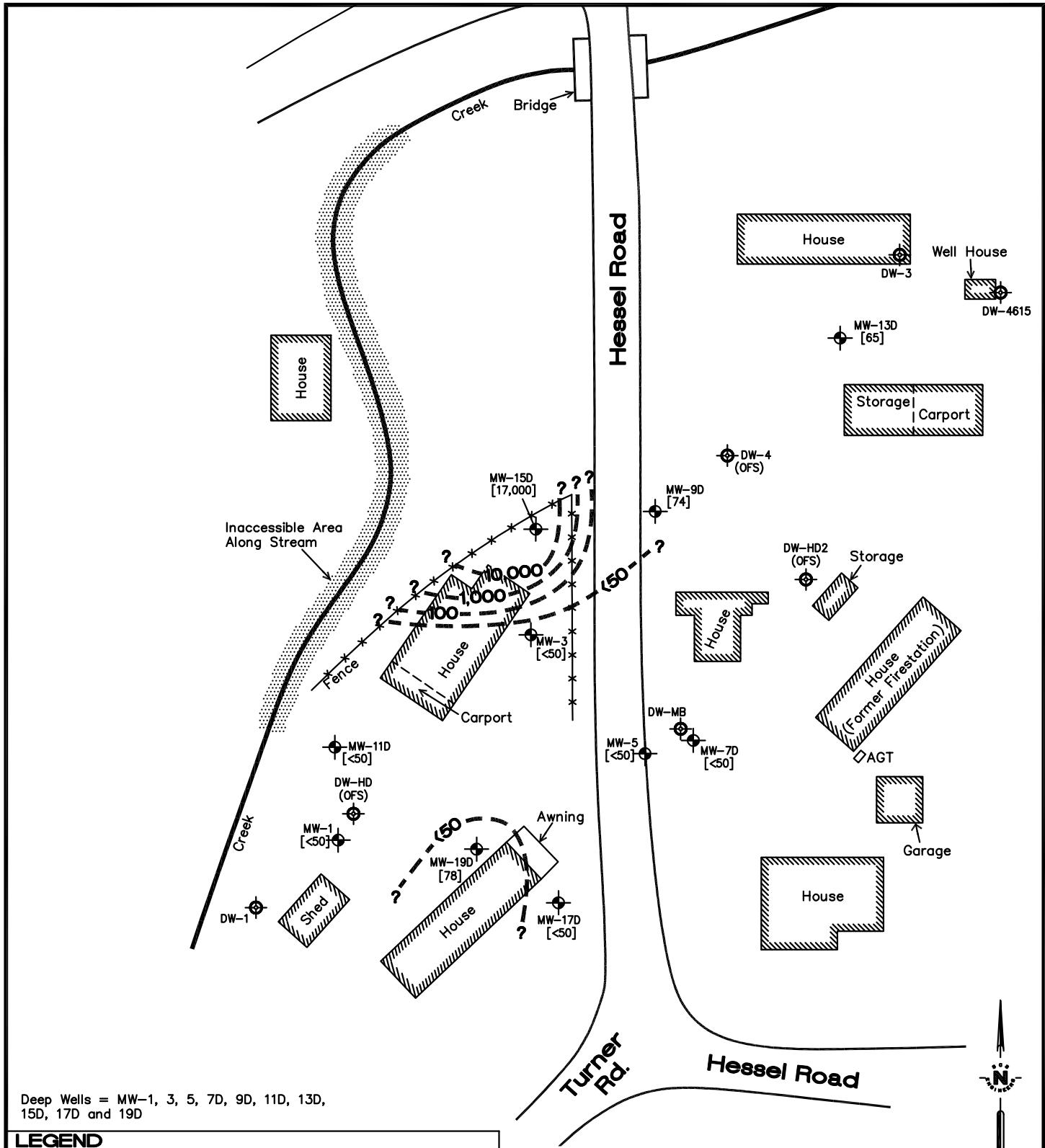
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PROJ. NO.: 3317.00	DWN. BY: AJH	ACAD FILE: 3317.00-IS03A-3422
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PROJECT TITLE: JOHN RIDDELL 4660 HESSEL ROAD SEBASTOPOL, CALIFORNIA	FIGURE NO.: 3A



Deep Wells = MW-1, 3, 5, 7D, 9D, 11D, 13D,
15D, 17D and 19D

LEGEND

-  Monitoring Well Location  Water Supply Well
 Isoconcentration Line DW = Domestic Well
TPH-g, ug/L HD = Hand Dug
OFS = Out of Service

APPROXIMATE SCALE IN FEET

A horizontal scale with numerical markings at -60, 0, and +60. The scale is represented by a thick black line with white segments at each marking. The segment between -60 and 0 is labeled '0' above the line. The segment between 0 and +60 is also labeled '0' above the line.

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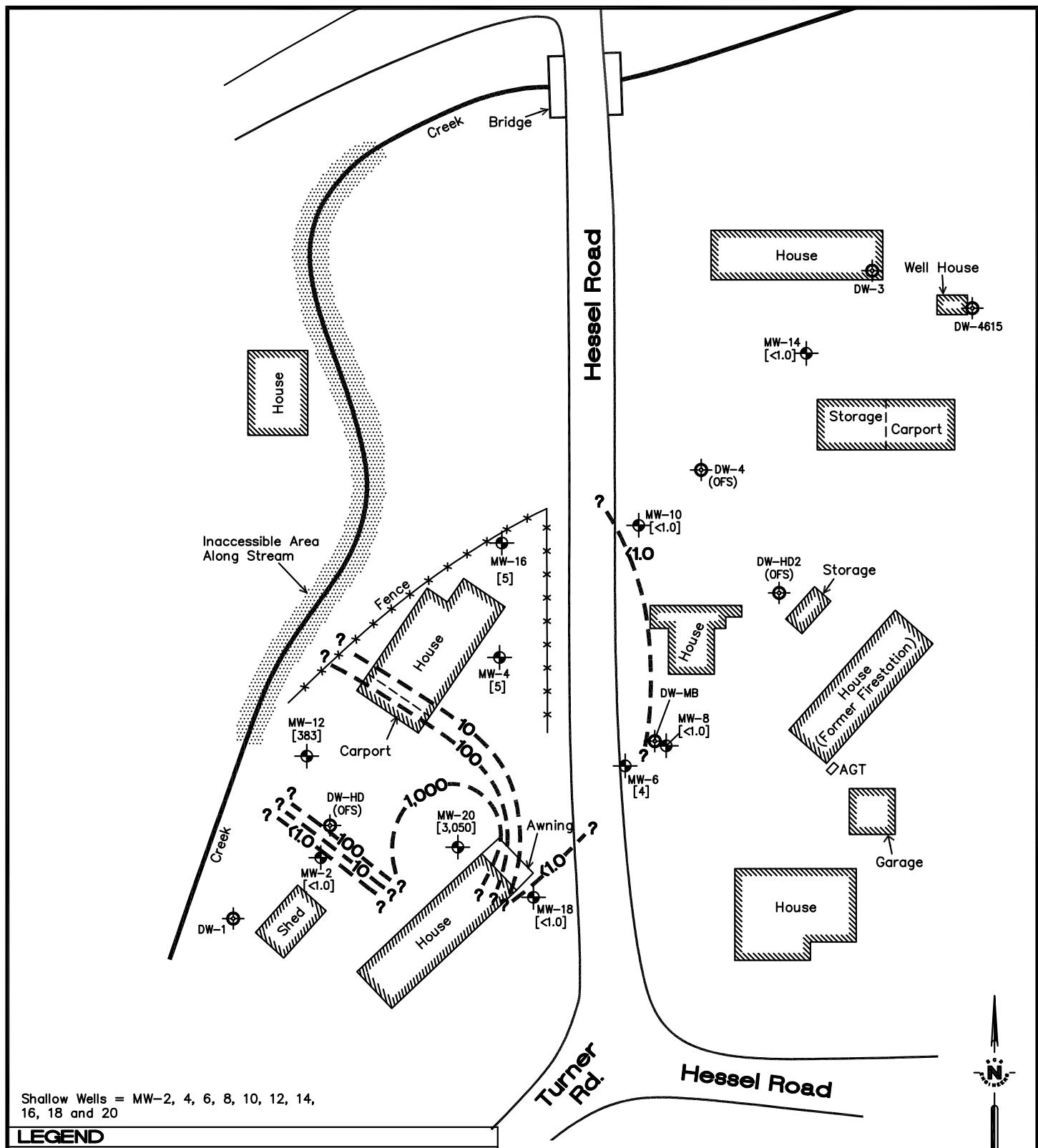
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TPH-G IN DEEP WELLS FOR JANUARY 2005

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4660 HESSEL ROAD
SEBASTOPOL, CALIFORNIA

SCALE:

FIGURE NO.:

3B

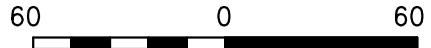


Shallow Wells = MW-2, 4, 6, 8, 10, 12, 14,
16, 18 and 20

LEGEND

Monitoring Well Location	Water Supply Well
Isoconcentration Line	DW = Domestic Well
Σ BTEX, ug/L	HD = Hand Dug
	OFS = Out of Service

APPROXIMATE SCALE IN FEET



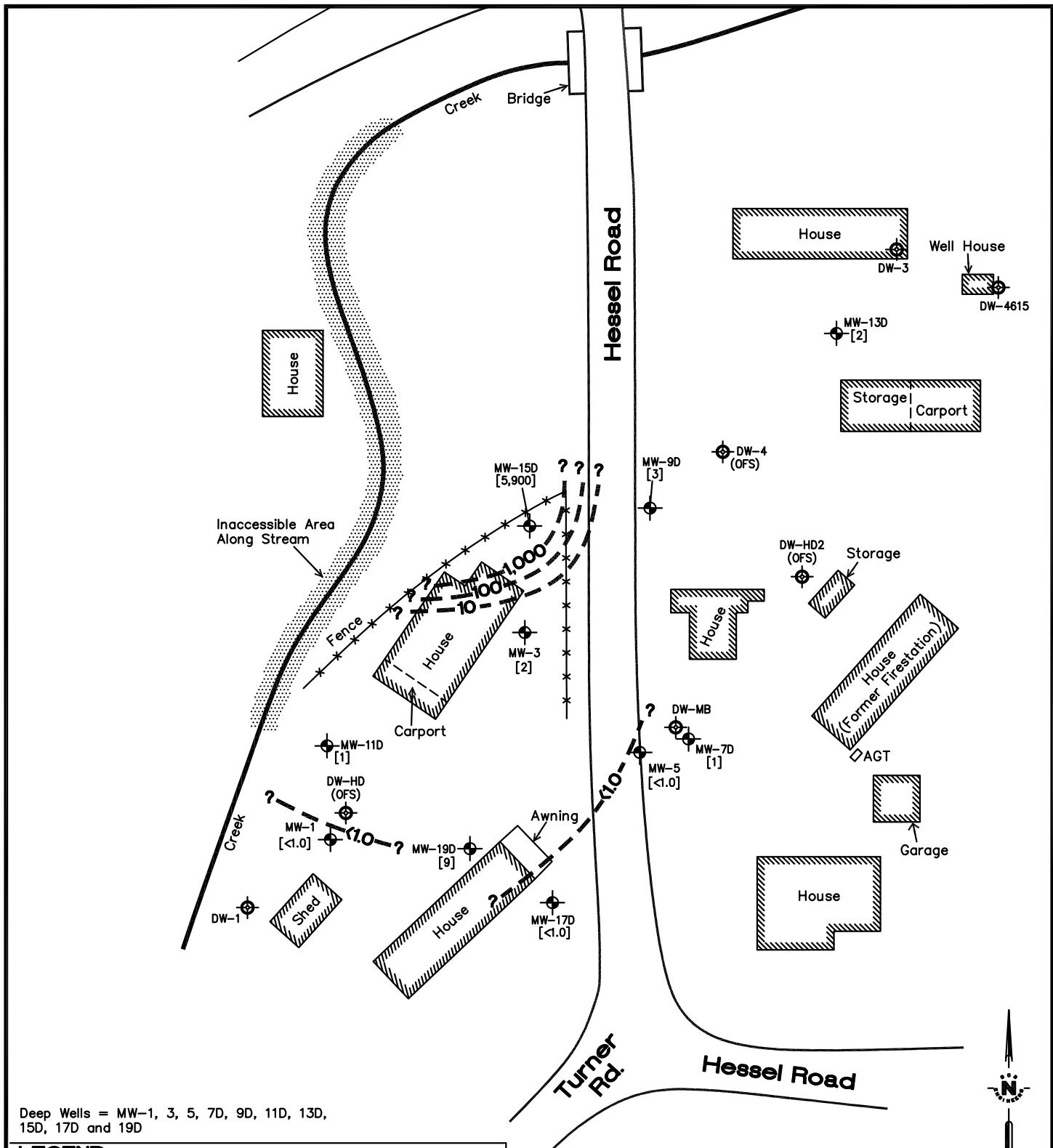
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SHEET TITLE: ISOCONCENTRATION MAP
BTEX IN SHALLOW WELLS FOR JANUARY 2005

PROJECT TITLE: JOHN RIDDELL
4660 HESSEL ROAD
SEBASTOPOL, CALIFORNIA

SCALE: 1" = 60'
FIGURE NO.: 4A

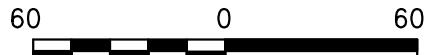


Deep Wells = MW-1, 3, 5, 7D, 9D, 11D, 13D,
15D, 17D and 19D

LEGEND

Monitoring Well Location	Water Supply Well
—●—	●
Isoconcentration Line	DW = Domestic Well
ΣBTEX, ug/L	HD = Hand Dug
	OFS = Out of Service

APPROXIMATE SCALE IN FEET



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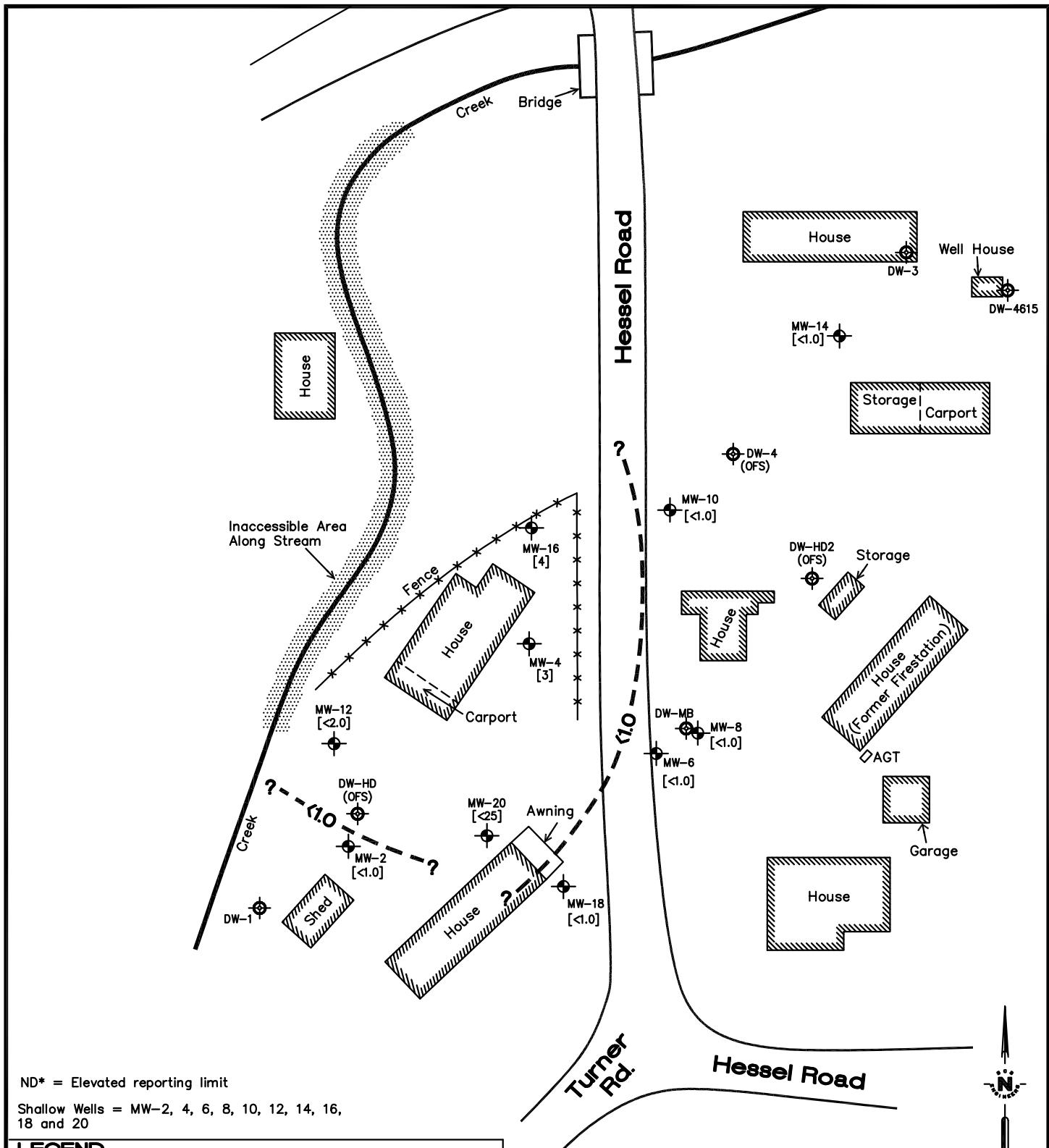
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BTEX IN DEEP WELLS FOR JANUARY 2005

PROJECT TITLE:

JOHN RIDDELL
4660 HESSEL ROAD
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SCALE:
1" = 60'

FIGURE NO.:
4B



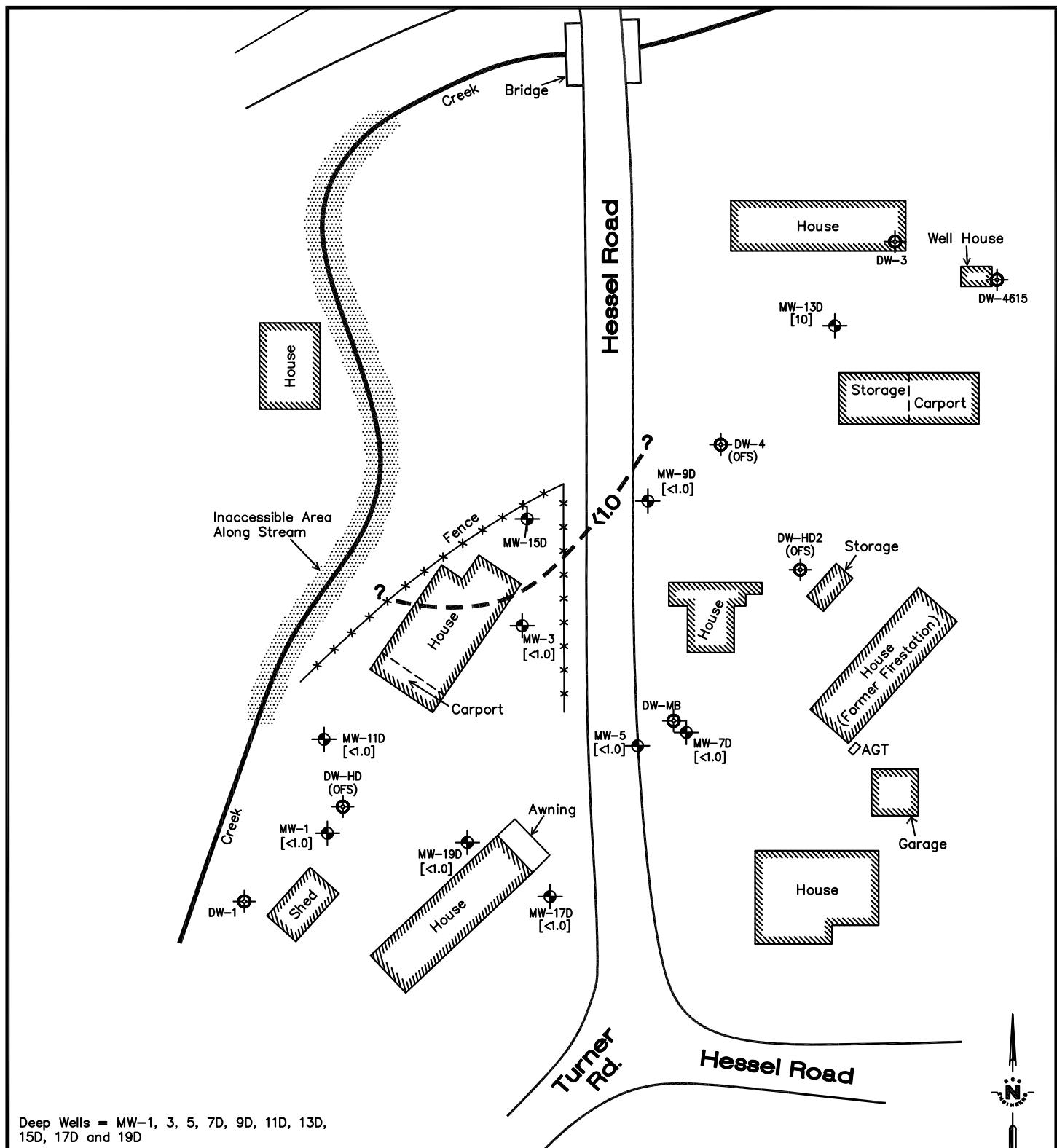
SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
3645 WESTWIND BOULEVARD
SANTA ROSA, CALIFORNIA 95403
PH. (707) 546-9461 FAX. (707) 544-5769

PROJ. NO:	3317.00	DWN. BY:	AJH	ACAD FILE:	3317.00-IS05A-3422
DATE:	3/14/05	CHK. BY:		APP. BY:	SK

SHEET TITLE: ISOCONCENTRATION MAP
EDC IN SHALLOW WELLS FOR JANUARY 2005

PROJECT TITLE: JOHN RIDDELL
4660 HESSEL ROAD
SEBASTOPOL, CALIFORNIA

SCALE: 1" = 60'
FIGURE NO.: 5A

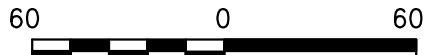


Deep Wells = MW-1, 3, 5, 7D, 9D, 11D, 13D, 15D, 17D and 19D

LEGEND

Monitoring Well Location	Water Supply Well
Isoconcentration Line 1,2-EDC, ug/L	
	DW = Domestic Well
	HD = Hand Dug
	OFS = Out of Service

APPROXIMATE SCALE IN FEET



SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
3645 WESTWIND BOULEVARD
SANTA ROSA, CALIFORNIA 95403
PH. (707) 546-9461 FAX. (707) 544-5769

PROJ. NO.: 3317.00	DWN. BY: AJH	ACAD FILE: 3317.00-IS05B-3422
DATE: 3/14/05	CHK. BY:	APP. BY: SK

SHEET TITLE: ISOCONCENTRATION MAP
EDC IN DEEP WELLS FOR JANUARY 2005

SCALE: 1" = 60'
FIGURE NO.: 5B

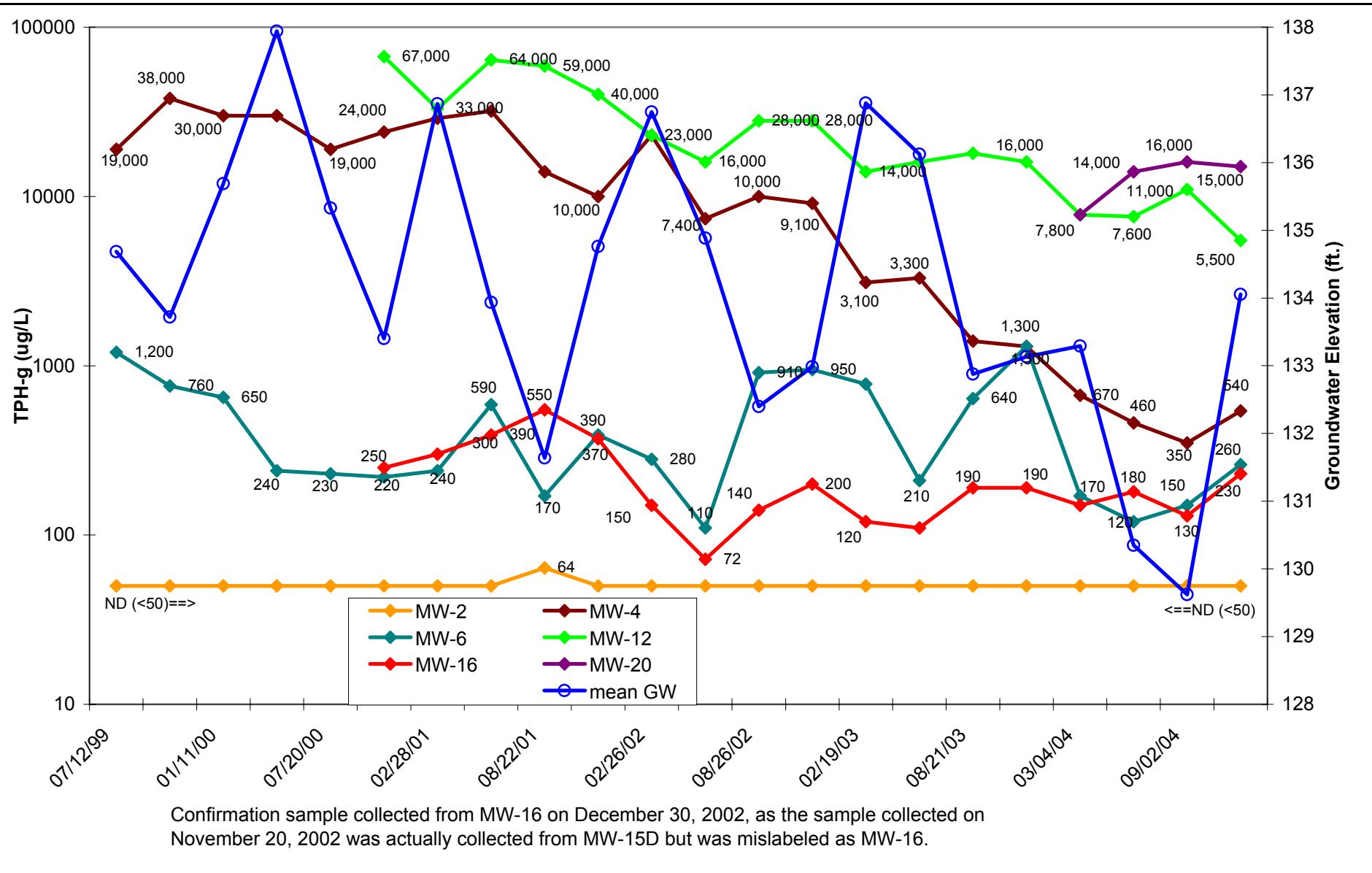
PROJECT TITLE: JOHN RIDDELL
4660 HESSEL ROAD
SEBASTOPOL, CALIFORNIA

Key to Diagrams and Tables
4660 Hessel Road, Sebastopol

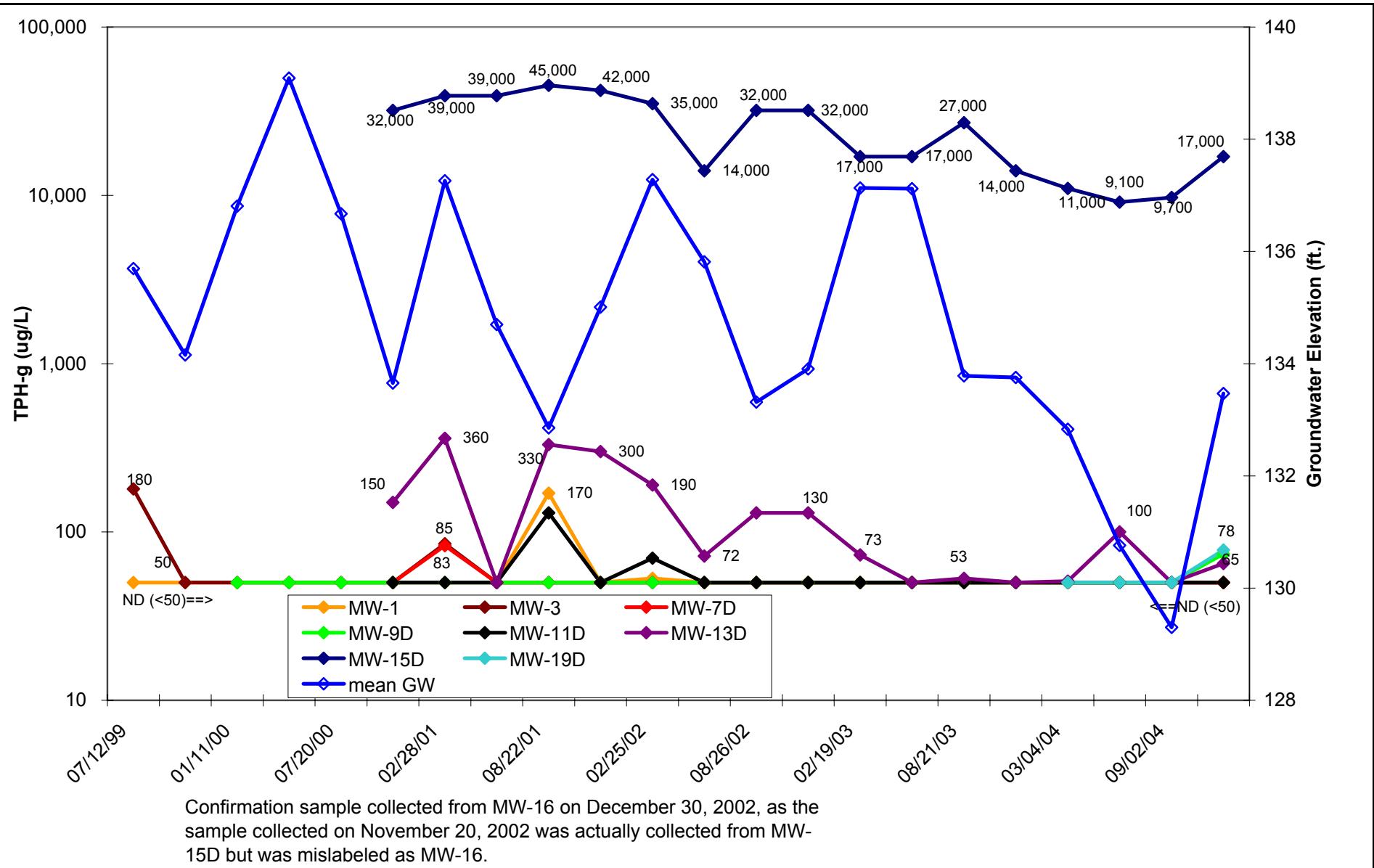
TPH-g	=	Total petroleum hydrocarbons in the gasoline range
TPH-d	=	Total petroleum hydrocarbons in the diesel range
TPH-mo	=	Total petroleum hydrocarbons in the motor oil range
TPH-k	=	Total petroleum hydrocarbons in the kerosene range
B	=	Benzene
T	=	Toluene
E	=	Ethylbenzene
X	=	Xylenes
MTBE	=	Methyl tertiary butyl ether
DIPE	=	Diisopropyl ether
ETBE	=	Ethyl tertiary butyl ether
TAME	=	Tertiary amyl methyl ether
TBA	=	Tert-butyl alcohol
Five Oxys	=	MTBE, DIPE, ETBE, TAME, TBA
Pb Scavs	=	Lead Scavengers (EDC and EDB)
EDC	=	Ethylene Dichloride ²
EDB	=	Ethylene Dibromide ³
VOCs	=	Volatile Organic Compounds
µg/L	=	Micrograms per liter
RDL	=	Report detection limit
ND	=	Below the laboratory report detection limit
NA	=	Not analyzed
msl	=	Mean sea level
INF	=	Influent
EFF	=	Effluent

2 EDC has been referred to as 1,2-dichloroethane (1,2-DCA) in previous reports

3 EDB has been referred to as 1,2-dibromoethane (1-2-DBA) in previous reports



SCS ENGINEERS	TPH-g & GROUNDWATER ELEVATION vs TIME - Shallow Wells	DIAGRAM
3645 WESTWIND BOULEVARD SANTA ROSA, CALIFORNIA	John Riddell 4660 Hessel Road, Sebastopol, California	A
Drawn By: KLC	File Name: TPH-g-GW	DATE: 01/19/05



SCS ENGINEERS

3645 WESTWIND BOULEVARD
SANTA ROSA, CALIFORNIA

Drawn By: KLC

TPH-g & GROUNDWATER ELEVATION vs TIME - Deep Wells

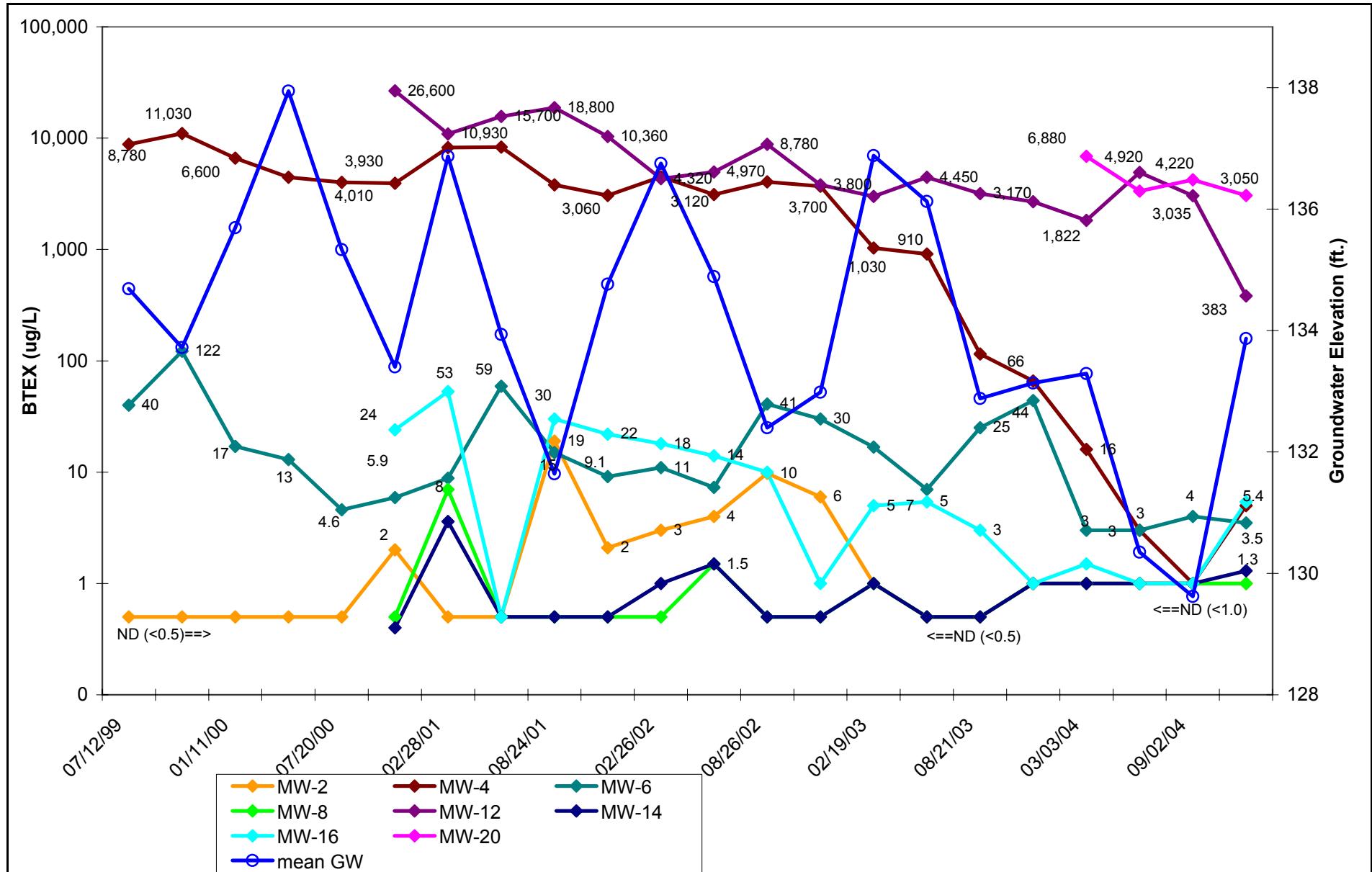
John Riddell
4660 Hessel Road, Sebastopol, California

Job Number: 01203317.00

DIAGRAM

B

DATE: 01/19/05



SCS ENGINEERS

3645 WESTWIND BOULEVARD
SANTA ROSA, CALIFORNIA

Drawn By: KLC

File Name: BTEX-GW

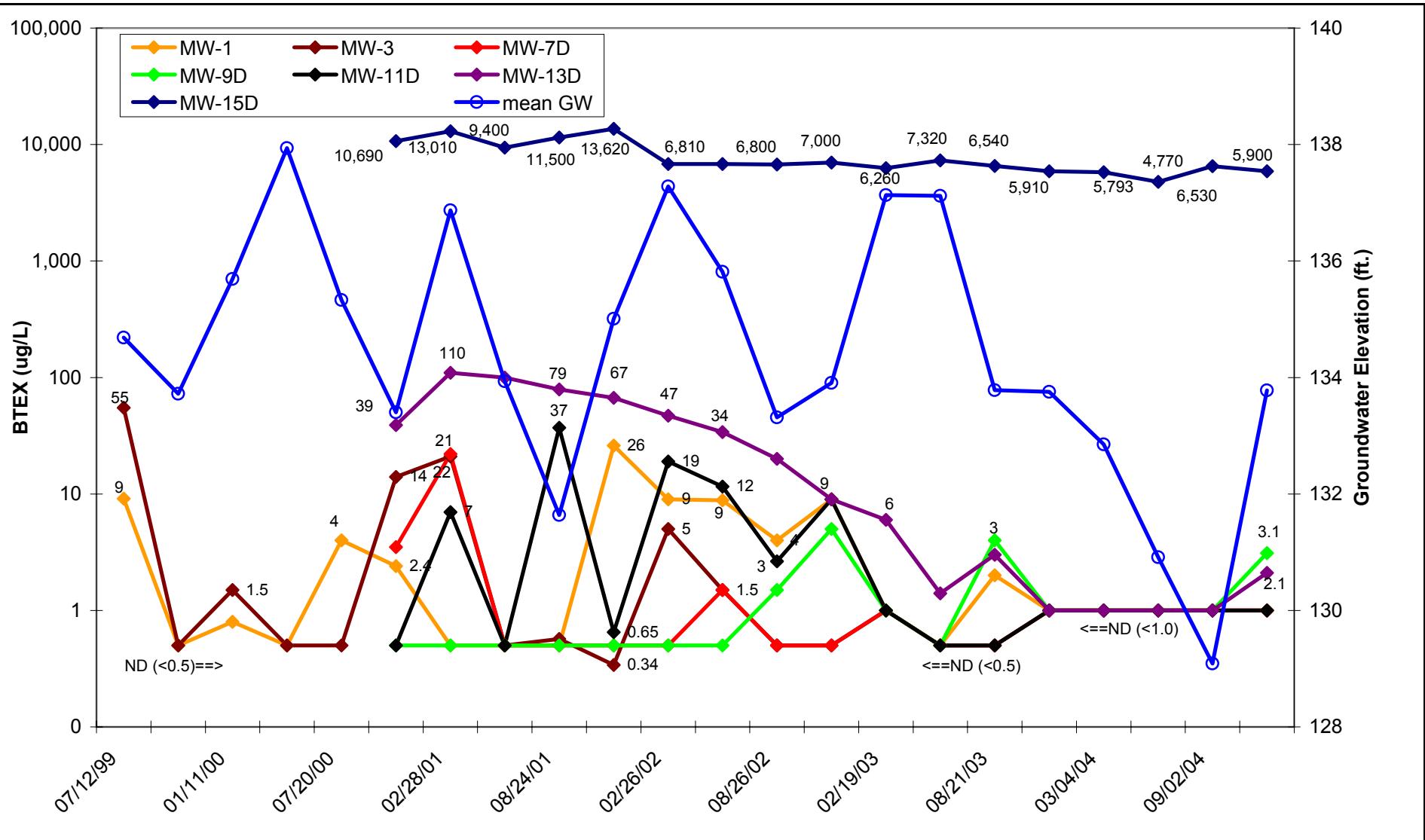
BTEX & GROUNDWATER ELEVATION vs TIME - Shallow Wells

John Riddell
4660 Hessel Road, Sebastopol, California
Job Number: 01203317.00

DIAGRAM

C

DATE: 01/19/05



SCS ENGINEERS

3645 WESTWIND BOULEVARD
SANTA ROSA, CALIFORNIA

Drawn By: KLC

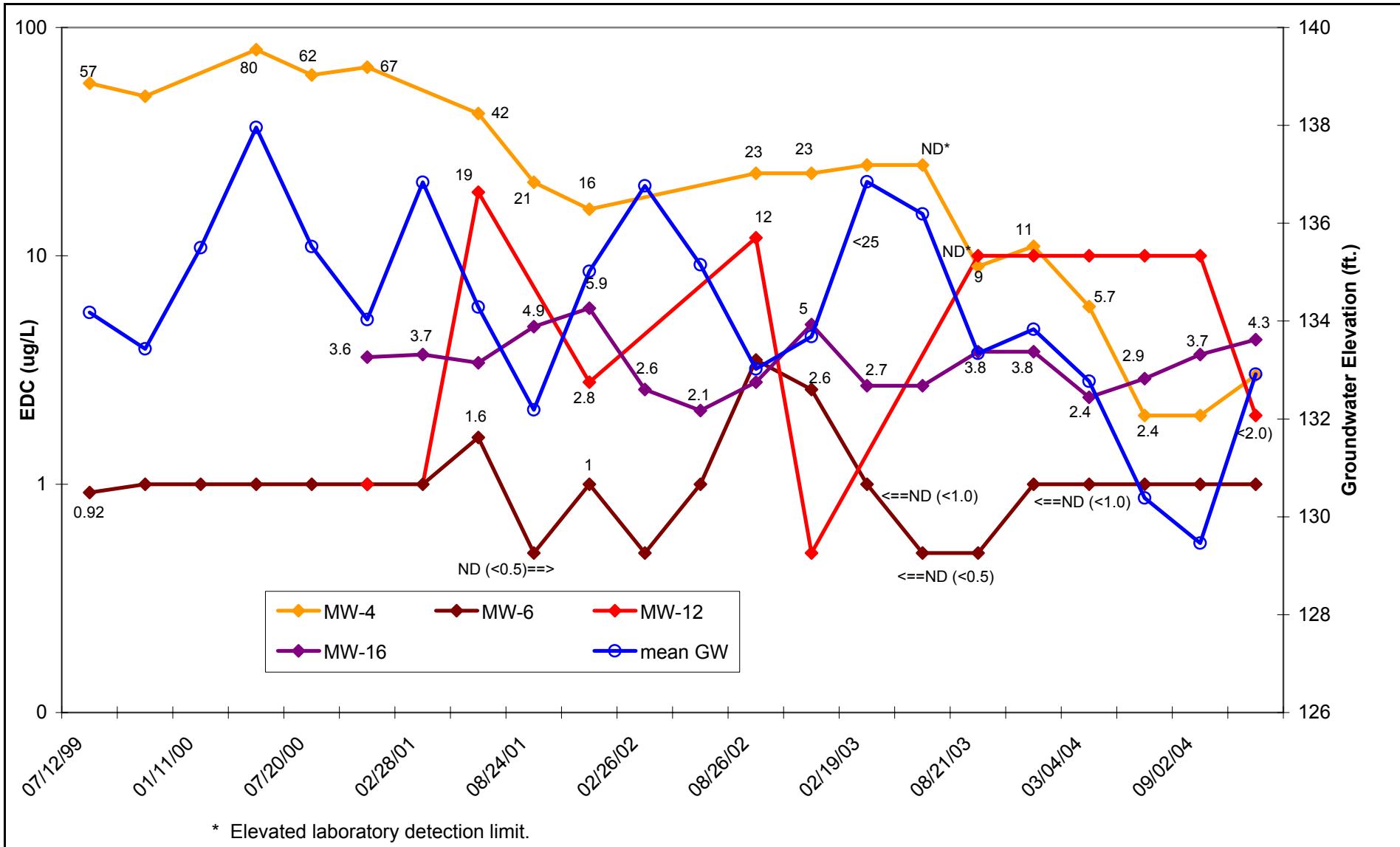
BTEX & GROUNDWATER ELEVATION vs TIME - Deep Wells

John Riddell
4660 Hessel Road, Sebastopol, California
Job Number: 01203317.00

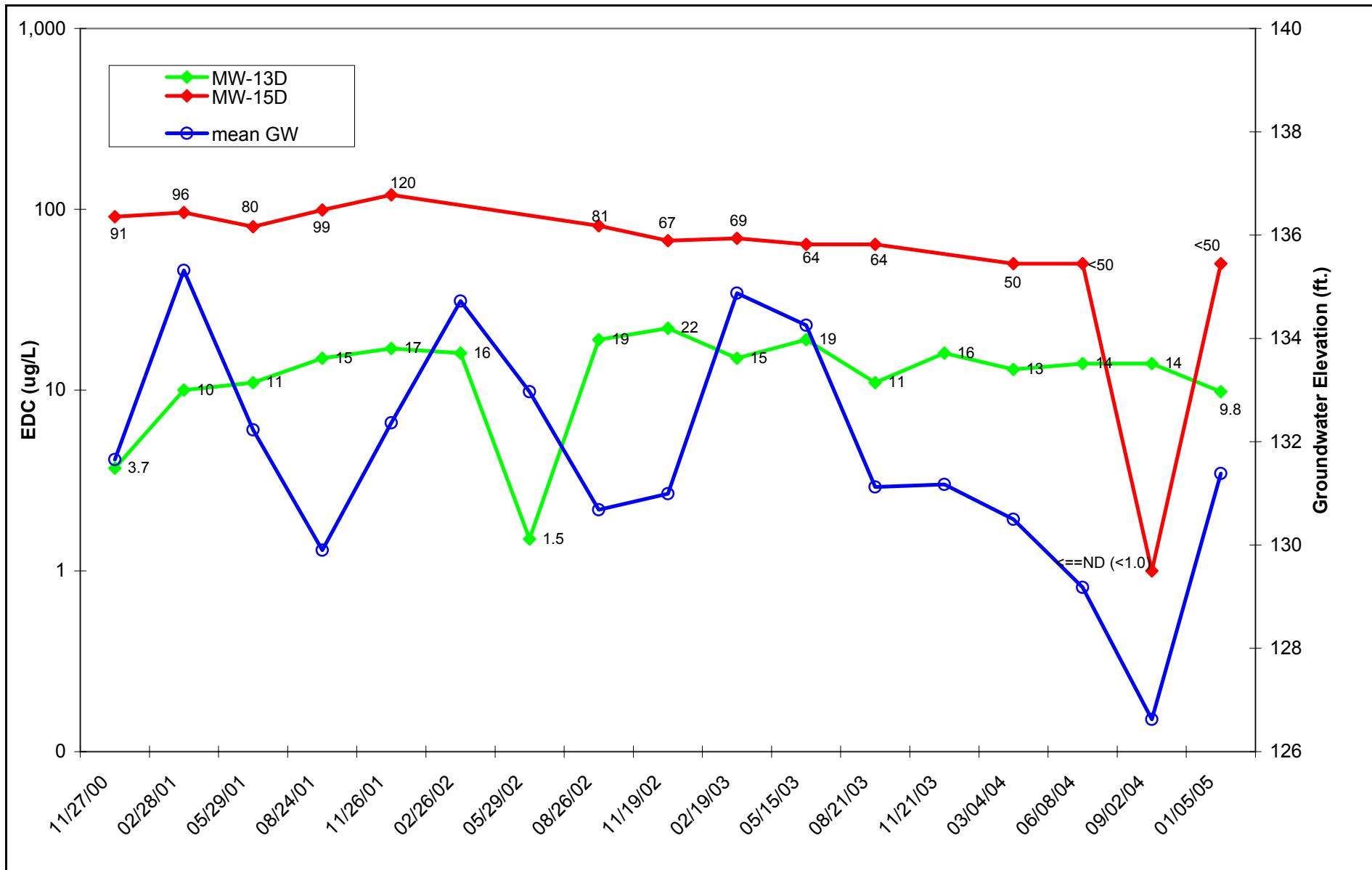
DIAGRAM

D

DATE: 01/19/05



SCS ENGINEERS	EDC & GROUNDWATER ELEVATION vs TIME - Shallow Wells	DIAGRAM
3645 WESTWIND BOULEVARD SANTA ROSA, CALIFORNIA Drawn By: KLC	John Riddell 4660 Hessel Road, Sebastopol, California File Name: EDC-GW Job Number: 01203317.00	E DATE: 01/19/05



SCS ENGINEERS	EDC & GROUNDWATER ELEVATION vs TIME - Deep Wells	DIAGRAM
3645 WESTWIND BOULEVARD SANTA ROSA, CALIFORNIA Drawn By: KLC	John Riddell 4660 Hessel Road, Sebastopol, California File Name: EDC-GW Job Number: 01203317.00	F DATE: 01/19/05

Table 1: Groundwater Flow Direction and Gradient for Shallow Wells
4660 Hessel Road, Sebastopol

Well #	Date	Top of Casing Elevation (feet > msl)	Depth to Groundwater (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction & Gradient (i)
MW-2	07/12/99	140.03	4.32	135.71	N20°E i = 0.02
MW-4		137.78	3.88	133.91	
MW-6		140.00	5.56	134.44	
MW-2	10/20/99	140.03	5.73	134.30	N20°W i = 0.04
MW-4		137.78	5.38	132.40	
MW-6		140.00	5.54	134.46	
MW-2	01/11/00	140.03	3.96	136.07	N10°W i = 0.02
MW-4		137.78	2.69	135.09	
MW-6		140.00	4.09	135.91	
MW-2	04/18/00	140.03	2.12	137.91	N40°W i = 0.04
MW-4		137.78	0.68	137.10	
MW-6		140.00	1.19	138.81	
MW-2	07/20/00	140.03	5.09	134.94	N45°W i = 0.02
MW-4		137.78	2.98	134.80	
MW-6		140.00	3.75	136.25	
MW-2	11/27/00	140.03	5.47	134.56	NNE i = 0.025
MW-4		137.78	3.58	134.20	
MW-6		140.00	4.89	135.11	
MW-8		140.24	5.30	134.94	
MW-10		136.89	5.53	131.36	
MW-12		139.38	5.65	133.73	
MW-14		135.18	4.95	130.23	
MW-16		137.38	4.30	133.08	
MW-2	02/28/01	140.03	2.04	137.99	N20°W i = 0.02
MW-4		137.78	0.57	137.21	
MW-6		140.00	1.16	138.84	
MW-8		140.24	1.64	138.60	
MW-10		136.89	0.85	136.04	
MW-12		139.39	3.75	135.64	
MW-14		135.18	0.21	134.97	
MW-16		137.38	1.72	135.66	
MW-2	05/29/01	140.03	4.78	135.25	N10°W i = 0.03
MW-4		137.78	3.31	134.47	
MW-6		140.00	4.42	135.58	
MW-8		140.24	4.82	135.42	
MW-10		136.89	4.48	132.41	
MW-12		139.38	5.48	133.90	
MW-14		135.18	3.92	131.26	
MW-16		137.38	4.18	133.20	
MW-2	08/22/01	140.03	7.0	133.03	N10°W i = 0.02
MW-4		137.78	5.50	132.28	
MW-6		140.00	6.88	133.12	
MW-8		140.24	7.39	132.85	
MW-10		136.89	7.30	129.59	
MW-12		139.38	6.95	132.43	
MW-14		135.18	6.30	128.88	
MW-16		137.38	6.46	130.92	

Table 1: Groundwater Flow Direction and Gradient for Shallow Wells
4660 Hessel Road, Sebastopol

Well #	Date	Top of Casing Elevation (feet > msl)	Depth to Groundwater (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction & Gradient (i)
MW-2	11/26/01	140.03	3.45	136.58	N10°W i = 0.02
MW-4		137.78	2.45	135.33	
MW-6		140.00	3.70	136.30	
MW-8		140.24	3.80	136.44	
MW-10		136.89	3.76	133.13	
MW-12		139.38	5.22	134.16	
MW-14		135.18	3.32	131.86	
MW-16		137.38	3.10	134.28	
MW-2	02/25/02	140.03	2.31	137.72	N20°W i = 0.03
MW-4		137.78	0.39	137.39	
MW-6		140.00	1.36	138.64	
MW-8		140.24	1.85	138.39	
MW-10		136.89	0.95	135.94	
MW-12		139.38	3.72	135.66	
MW-14		135.18	0.30	134.88	
MW-16		137.38	2.01	135.37	
MW-2	05/29/02	140.03	4.12	135.91	Northerly i = 0.02
MW-4		137.78	2.0	135.78	
MW-6		140.00	3.36	136.64	
MW-8		140.24	3.86	136.38	
MW-10		136.89	3.23	133.66	
MW-12		139.38	5.26	134.12	
MW-14		135.18	2.66	132.52	
MW-16		137.38	3.31	134.07	
MW-2	08/26/02	140.03	6.05	133.98	Northerly i = 0.01
MW-4		137.78	4.46	133.32	
MW-6		140.00	6.51	133.49	
MW-8		140.24	7.38	132.86	
MW-10		136.89	6.34	130.55	
MW-12		139.38	6.0	133.38	
MW-14		135.18	5.47	129.71	
MW-16		137.38	5.49	131.89	
MW-2	11/19/02	140.03	5.35	134.68	N to NE i = 0.02
MW-4		137.78	3.78	134.00	
MW-6		140.00	5.75	134.25	
MW-8		140.24	6.48	133.76	
MW-10		136.89	5.92	130.97	
MW-12		139.38	5.50	133.88	
MW-14		135.18	5.46	129.72	
MW-16		137.38	4.77	132.61	
MW-2	02/18/03	140.03	2.03	138.00	Apparent N-NE Gradient not calculated
MW-4		137.78	0.40	137.38	
MW-6		140.00	1.31	138.69	
MW-8		140.24	1.78	138.46	
MW-10		136.89	0.80	136.09	
MW-12		139.38	3.65	135.73	
MW-14		135.18	0.10	135.08	
MW-16		137.38	1.79	135.59	

Table 1: Groundwater Flow Direction and Gradient for Shallow Wells
4660 Hessel Road, Sebastopol

Well #	Date	Top of Casing Elevation (feet > msl)	Depth to Groundwater (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction & Gradient (i)	
MW-2	05/14/03	140.03	2.82	137.21	Northerly i = 0.02	
MW-4		137.78	0.98	136.80		
MW-6		140.00	2.04	137.96		
MW-8		140.24	2.53	137.71		
MW-10		136.89	1.74	135.15		
MW-12		139.38	4.31	135.07		
MW-14		135.18	1.02	134.16		
MW-16		137.38	2.45	134.93		
MW-2	08/20/03	140.03	5.41	134.62	Northeasterly i = 0.01	
MW-4		137.78	4.05	133.73		
MW-6		140.00	5.98	134.02		
MW-8		140.24	6.77	133.47		
MW-10		136.89	5.77	131.12		
MW-12		139.38	5.82	133.56		
MW-14		135.18	4.72	130.46		
MW-16		137.38	5.33	132.05		
MW-2	11/20/03	140.03	5.33	134.70	Northeasterly i = 0.02	
MW-4		137.78	3.47	134.31		
MW-6		140.00	5.45	134.55		
MW-8		140.24	6.13	134.11		
MW-10		136.89	5.90	130.99		
MW-12		139.38	5.58	133.80		
MW-14		135.18	5.25	129.93		
MW-16		137.38	4.71	132.67		
MW-2	03/02/04*	135.97	2.56	133.41	Northerly i = 0.03	
MW-4		133.74	0.10	133.64		
MW-6		135.97	1.60	134.37		
MW-8		136.20	1.57	134.63		
MW-10		132.85	1.0	131.85		
MW-12		135.32	3.79	131.53		
MW-14		131.15	Artesian conditions			
MW-16		133.33	1.78	131.55		
MW-18		137.95	1.0	136.95		
MW-20		136.93	1.59	135.34		
Stand Pipe		135.11	5.20**	129.91		
Bridge		132.97	7.72	125.25		

* Previously existing wells were re-surveyed and MW-18 and MW-20 were surveyed to msl on February 26 and March 4, 2004.

** Measurement collected on March 12, 2004.

Table 1: Groundwater Flow Direction and Gradient for Shallow Wells
4660 Hessel Road, Sebastopol

Well #	Date	Top of Casing Elevation (feet > msl)	Depth to Groundwater (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction & Gradient (i)	
MW-2	06/07/04	135.97	4.14	131.83	Northerly i = 0.03	
MW-4		133.74	2.88	130.86		
MW-6		135.97	4.39	131.58		
MW-8		136.20	5.05	131.15		
MW-10		132.85	4.34	128.51		
MW-12		135.32	5.43	129.89		
MW-14		131.15	3.58	127.57		
MW-16		133.33	4.12	129.21		
MW-18		137.95	4.24	133.71		
MW-20		136.93	4.38	132.55		
Stand Pipe		135.11	6.14	128.97		
Bridge		132.97	7.84	125.13		
MW-2	09/02/04	135.97	2.87	133.10	N-NE i = 0.03	
MW-4		133.74	3.97	129.77		
MW-6		135.97	5.61	130.36		
MW-8		136.20	6.32	129.88		
MW-10		132.85	5.99	126.86		
MW-12		135.32	5.35	129.97		
MW-14		131.15	4.86	126.29		
MW-16		133.33	5.58	127.75		
MW-18		137.95	4.47	133.48		
MW-20		136.93	4.33	132.60		
Stand Pipe		135.11	6.62	128.49		
Bridge		132.97	7.88	125.09		
MW-2	01/04/05	135.97	1.33	134.64	N-NW i = 0.05	
MW-4		133.74	Artesian conditions			
MW-6		135.97	0.56	135.41		
MW-8		136.20	1.15	135.05		
MW-10		132.85	0.39	132.46		
MW-12		135.32	4.11	131.21		
MW-14		131.15	Artesian conditions			
MW-16		133.33	1.21	132.12		
MW-18		137.95	0.47	137.48		
MW-20		136.93	0.76	136.17		
Stand Pipe		135.11	NM			
Bridge		132.97	NM			

Notes:

Groundwater flow direction rounded to nearest 5 degrees.

Table 2: Groundwater Flow Direction and Gradient for Deep Wells
4660 Hessel Road, Sebastopol

Well #	Date	Top of Casing Elevation (feet > msl)	Depth to Groundwater (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction & Gradient (i)	
MW-1	07/12/99	139.76	2.26	137.50	N85°E i = 0.02	
MW-3		137.79	2.41	135.38		
MW-5		139.40	5.20	134.20		
MW-1	10/20/99	139.76	3.13	136.63	N75°E i = 0.03	
MW-3		137.79	4.26	133.53		
MW-5		139.40	7.10	132.30		
MW-1	01/11/00	139.76	2.0	137.76	N15°E i = 0.02	
MW-3		137.79	1.97	135.82		
MW-5		139.40	2.56	136.84		
MW-1	04/18/00	139.76	0.41	139.35	Not calculated	
MW-3		137.79	Artesian conditions encountered			
MW-5		139.40	0.57	138.83		
MW-1	07/20/00	139.76	2.59	137.17	N5°E i = 0.01	
MW-3		137.79	1.63	136.16		
MW-5		139.40	2.72	136.68		
MW-1	11/27/00	139.75	3.49	136.26	N35°E i = 0.025	
MW-3		137.79	2.29	135.50		
MW-5		139.40	3.62	135.78		
MW-7D		140.14	4.32	135.82		
MW-9D		136.92	7.13	129.29		
MW-11D		139.41	2.74	136.67		
MW-13D		135.30	6.84	128.46		
MW-15D		137.22	5.78	131.44		
MW-1	02/28/01	139.75	0.56	139.19	N5°E i = 0.02	
MW-3		137.79	Artesian conditions			
MW-5		139.40	0.17	139.23		
MW-7D		140.14	0.79	139.35		
MW-9D		136.92	2.91	134.01		
MW-11D		139.41	0.04	139.37		
MW-13D		135.30	0.59	134.71		
MW-15D		137.22	2.26	134.96		
MW-1	05/29/01	139.75	2.65	137.10	North i = 0.05	
MW-3		137.79	1.70	136.09		
MW-5		139.40	2.86	136.54		
MW-7D		140.14	3.53	136.61		
MW-9D		136.92	4.80	132.12		
MW-11D		139.41	1.96	137.45		
MW-13D		135.30	5.87	129.43		
MW-15D		137.22	4.99	132.23		

Table 2: Groundwater Flow Direction and Gradient for Deep Wells
4660 Hessel Road, Sebastopol

Well #	Date	Top of Casing Elevation (feet > msl)	Depth to Groundwater (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction & Gradient (i)
MW-1	08/22/01	139.75	4.75	135.00	N5°E i = 0.04
MW-3		137.79	3.82	133.97	
MW-5		139.40	5.07	134.33	
MW-7D		140.14	5.73	134.41	
MW-9D		136.92	6.78	130.14	
MW-11D		139.41	4.08	135.33	
MW-13D		135.30	5.99	129.31	
MW-15D		137.22	6.88	130.34	
MW-1	11/26/01	139.75	2.80	136.95	North i = 0.03
MW-3		137.79	1.92	135.87	
MW-5		139.40	3.40	136.00	
MW-7D		140.14	4.10	136.04	
MW-9D		136.92	3.71	133.21	
MW-11D		139.41	2.13	137.28	
MW-13D		135.30	3.49	131.81	
MW-15D		137.22	4.30	132.92	
MW-1	02/25/02	139.75	0.68	139.07	N35°E i = 0.03
MW-3		137.79		Artesian conditions	
MW-5		139.40	0.60	138.80	
MW-7D		140.14	1.16	138.98	
MW-9D		136.92	1.55	135.37	
MW-11D		139.41	0.12	139.29	
MW-13D		135.30	0.57	134.73	
MW-15D		137.22	2.50	134.72	
MW-1	05/29/02	139.75	1.91	137.84	N to NE i = 0.02
MW-3		137.79	1.20	136.59	
MW-5		139.40	2.36	137.04	
MW-7D		140.14	3.0	137.14	
MW-9D		136.92	3.14	133.78	
MW-11D		139.41	1.23	138.18	
MW-13D		135.30	2.65	132.65	
MW-15D		137.22	3.93	133.29	
MW-1	08/26/02	139.75	4.25	135.50	N to NE i = 0.02
MW-3		137.79	3.45	134.34	
MW-5		139.40	4.96	134.44	
MW-7D		140.14	5.59	134.55	
MW-9D		136.92	6.41	130.51	
MW-11D		139.41	3.60	135.81	
MW-13D		135.30	5.10	130.20	
MW-15D		137.22	6.05	131.17	
MW-1	11/19/02	139.75	4.08	135.67	N to NE i = 0.02
MW-3		137.79	2.93	134.86	
MW-5		139.40	4.36	135.04	
MW-7D		140.14	4.99	135.15	
MW-9D		136.92	4.81	132.11	
MW-11D		139.41	2.97	136.44	
MW-13D		135.30	4.96	130.34	
MW-15D		137.22	5.57	131.65	

Table 2: Groundwater Flow Direction and Gradient for Deep Wells
4660 Hessel Road, Sebastopol

Well #	Date	Top of Casing Elevation (feet > msl)	Depth to Groundwater (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction & Gradient (i)	
MW-1	02/18/03	139.75	1.03	138.72	Apparent N-NE Gradient not calculated	
MW-3		137.79	Artesian conditions encountered			
MW-5		139.40	0.07	139.33		
MW-7D		140.14	1.24	138.90		
MW-9D		136.92	2.92	134.00		
MW-11D		139.41	0.20	139.21		
MW-13D		135.30	0.50	134.80		
MW-15D		137.22	2.27	134.95		
MW-1	05/14/03	139.75	1.19	138.56	N-NE i = 0.02	
MW-3		137.79	0.15	137.64		
MW-5		139.40	1.08	138.32		
MW-7D		140.14	1.66	138.48		
MW-9D		136.92	0.50	136.42		
MW-11D		139.41	0.38	139.03		
MW-13D		135.30	1.15	134.15		
MW-15D		137.22	2.86	134.36		
MW-1	08/20/03	139.75	3.90	135.85	N-NE i = 0.02	
MW-3		137.79	2.99	134.80		
MW-5		139.40	4.42	134.98		
MW-7D		140.14	5.03	135.11		
MW-9D		136.92	5.93	130.99		
MW-11D		139.41	3.14	136.27		
MW-13D		135.30	4.60	130.70		
MW-15D		137.22	5.67	131.55		
MW-1	11/20/03	139.75	3.93	135.82	N-NE i = 0.02	
MW-3		137.79	2.77	135.02		
MW-5		139.40	4.15	135.25		
MW-7D		140.14	4.78	135.36		
MW-9D		136.92	6.98	129.94		
MW-11D		139.41	3.13	136.28		
MW-13D		135.30	4.81	130.49		
MW-15D		137.22	5.36	131.86		
MW-1	3/2/2004*	135.69	1.00	134.69	Northerly i = 0.04	
MW-3		133.75	1.65	132.10		
MW-5		135.36	0.30	135.06		
MW-7D		136.08	1.40	134.68		
MW-9D		132.88	4.40	128.48		
MW-11D		135.35	1.05	134.30		
MW-13D		131.28	Artesian conditions			
MW-15D		133.19	2.69	130.50		
MW-17D		137.84	1.60	136.24		
MW-19D		137.05	1.10	135.95		

Table 2: Groundwater Flow Direction and Gradient for Deep Wells
4660 Hessel Road, Sebastopol

Well #	Date	Top of Casing Elevation (feet > msl)	Depth to Groundwater (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction & Gradient (i)
MW-1	06/07/04	135.69	2.79	132.90	N-NE i = 0.04
MW-3		133.75	2.01	131.74	
MW-5		135.36	3.24	132.12	
MW-7D		136.08	3.85	132.23	
MW-9D		132.88	7.67	125.21	
MW-11D		135.35	2.18	133.17	
MW-13D		131.28	3.42	127.86	
MW-15D		133.19	4.55	128.64	
MW-17D		137.84	4.26	133.58	
MW-19D		137.05	3.73	133.32	
MW-1	09/02/04	135.69	4.24	131.45	Northerly i = 0.03
MW-3		133.75	2.98	130.77	
MW-5		135.36	4.20	131.16	
MW-7D		136.08	4.78	131.30	
MW-9D		132.88	11.58	121.30	
MW-11D		135.35	3.49	131.86	
MW-13D		131.28	5.21	126.07	
MW-15D		133.19	6.01	127.18	
MW-17D		137.84	4.16	133.68	
MW-19D		137.05	4.07	132.98	
MW-1	01/04/05	135.69	0.76	134.93	Northerly i = 0.03
MW-3		133.75		Artesian conditions	
MW-5		135.36	0.11	135.25	
MW-7D		136.08	1.00	135.08	
MW-9D		132.88	3.93	128.95	
MW-11D		135.35	0.31	135.04	
MW-13D		131.28	0.52	130.76	
MW-15D		133.19	1.18	132.01	
MW-17D		137.84	1.57	136.27	
MW-19D		137.05	1.34	135.71	

* Previously existing wells were re-surveyed and new wells were surveyed to msl on February 26 and March 4, 2004

Table 3: Domestic Well Analytical Results
4660 Hessel Road, Sebastopol

ID	Date	TPH-g	TPH-d	TPH-mo	B	T	E	X	EDC	MTBE	Other VOCs
		ug/L									
DW-1	08/09/99	<50	NA	NA	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA
	10/20/99	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA
	02/28/01	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA
	08/22/01	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA
	02/26/02	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA
	08/27/02	NA	NA	NA	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5
	02/19/03	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	08/21/03	<50	NA	NA	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5
	03/03/04	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	09/02/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	01/04/05	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
DW-HD	08/09/99	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/20/99	<50	<50	120	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA
	02/26/02	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA
	08/26/02	Well was dry									
	02/19/03	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.0
	08/20/03	<50	NA	NA	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5
DW-HD2	03/03/04	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	08/09/99	<50	NA	NA	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA
	10/20/99	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA
	02/28/01	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA
	08/22/01	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA
	02/26/02	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA
	08/26/02	NA	NA	NA	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5
	02/19/03	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	08/21/03	<50	NA	NA	<0.3	<0.3	<0.5	<0.5	NA	<0.5	<0.5
	03/02/04	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
DW-3	09/02/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	01/04/05	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	08/09/99	<50	NA	NA	<0.3	<0.3	<0.5	<0.5	2.2 EDC	<0.5	NA
	10/20/99	<50	<50	<100	0.45	<0.3	<0.5	<0.5	4.9 EDC	<0.5	NA
	01/11/00	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	2.6 EDC	<0.5	NA
	01/17/00*	<50	NA	NA	<0.3	<0.3	<0.5	<0.5	2.2 EDC	<0.5	NA
	04/18/00 INF	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	1.0 EDC	<0.5	NA
	04/18/00 EFF	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	1.0 EDC	<0.5	NA
	07/26/00	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	2.0 EDC	<0.5	NA
	11/27/00	<50	<50	<100	0.31	<0.3	<0.5	<0.5	3.2 EDC	<0.5	NA
	02/28/01	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA
	08/22/01	No access - Property owner not home									
	11/26/01	No access - Property owner not home									
	02/25/02	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	0.70 EDC	<0.5	NA
	08/26/02	NA	NA	NA	<0.3	<0.3	<0.5	<0.5	2.1 EDC	<0.5	<0.5
	02/19/03	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	08/21/03	<50	NA	NA	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5
	03/02/04	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	09/02/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	01/04/05	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

* Confirmation sampling of January 11, 2000 detections.

Table 3: Domestic Well Analytical Results
4660 Hessel Road, Sebastopol

ID	Date	TPH-g	TPH-d	TPH-mo	B	T	E	X	EDC	MTBE	Other VOCs
		ug/L									
DW-4	08/09/99	190	NA	NA	<0.3	<0.3	<0.5	3.0	11 EDC	<0.5	NA
	10/20/99	500	<50	<100	50	1.3	2.9	23	20 EDC	<0.5	NA
	01/11/00	67	<50	<100	<0.3	<0.3	<0.5	2.6	7.1 EDC	<0.5	NA
	01/17/00*	83	NA	NA	1.0	<0.3	<0.5	<0.5	7.1 EDC	<0.5	NA
	04/18/00	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA
	07/20/00	<50	<50	<100	2.3	<0.3	<0.5	<0.5	2.6 EDC	<0.5	NA
	11/27/00	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA
	02/28/01	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA
	08/22/01	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA
	02/26/02	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA
	08/26/02	NA	NA	NA	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5
	02/19/03	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	08/21/03	<50	NA	NA	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5
	03/02/04	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
DW-4615	09/02/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	01/04/05	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	08/26/02	NA	NA	NA	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5
	02/19/03	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	05/15/03	NA	NA	NA	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5
	08/21/03	<50	NA	NA	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5
	11/21/03	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	03/02/04	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
DW-MB	06/07/04	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	09/02/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	01/04/05	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Note: Analysis for TPH-g, TPH-d, and TPH-mo removed from analytical suite with regulatory concurrence in August 20, 2002 letter.

* Confirmation sampling of January 11, 2000 contaminant hits.

**Table 4: Monitoring Well Analytical Results
4660 Hessel Road, Sebastopol**

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4660 Hessel Road, Sebastopol

ID	Date	TPH-g	TPH-d	TPH-mo	B	T	E	X	EDC	MTBE	DIPE	ETBE	TAME	TBA	n-butylbenzene	sec-butylbenzene	Methyl ethyl ketone	Styrene	isopropylbenzene	p-isopropyltoluene	naphthalene	n-propylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Chloroform
		ug/L																							
MW-4	07/12/99	19000	3000	<100	4000	680	990	3200	57 EDC	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/20/99	38000	1200	<100	6100	330	1300	3100	<10	<10	<10	<10	<10	<10	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/11/00	30000	1200	<100	4100	350	550	1600	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/18/00	30000	3300 ¹	ND	6600	750	1000	2700	80 EDC	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/20/00	19000	3,200 ¹	<200	4700	890	920	2200	62 EDC	<2.0	<2.0	<2.0	<2.0	<2.0	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/27/00	24000	2,000 ¹	<100	6700	330	1200	2400	67 EDC	<10	<10	<10	<10	<10	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/28/01	29000	3900	330	4200	410	830	2800	<50	<50	<50	<50	<50	<50	<500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/29/01	32000	1,400 ¹	<110	4200	490	920	2700	42 EDC	<5.0	<5.0	<5.0	<5.0	<5.0	<100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/24/01	14000	530 ¹	<110	2500	150	540	640	21 EDC	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/26/01	10000	410 ¹	<100	2100	70	90	800	16 EDC	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/26/02	23000	1,100 ¹	<100	3200	<150	440	860	<250	<250	<250	<250	<250	<250	<5,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/30/02	7400	1,000 ¹	<200	2400	40	390	290	<50	<50	<50	<50	<50	<50	<1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/27/02	10000	NA	NA	3500	6.6	540	9.8	23 EDC	<0.5	NA	NA	NA	NA	8.8	4.3	<1.0	<0.5	21	2.4	11	51	100	1.2	<0.5
	11/19/02	9100	NA	NA	3300	9.2	380	26	23 EDC	<0.5	NA	NA	NA	NA	6.3	2.8	<1.0	<0.5	18	1.4	13	45	46	2.1	<0.5
	02/19/03	3100	NA	NA	910	<25	120	<25	<25	<25	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	29	<1.0	<1.0	<1.0
	05/15/03	3300	NA	NA	800	<15	110	<25	<25	<25	NA	NA	NA	NA	<25	<25	<50	<25	<25	<25	<25	36	<25	<25	<25
	08/21/03	1400	NA	NA	35	<3.0	80	<5.0	9.1 EDC	<5.0	NA	NA	NA	NA	<5.0	<5.0	<10	<5.0	9.7	<5.0	<5.0	27	<5.0	<5.0	<5.0
	11/20/03	1300	NA	NA	85	2.3	36	19.2	11 EDC	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	03/03/04	670	NA	NA	8.1	<1.0	7.6	<1.0	5.7 EDC	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	4.4	<1.0	<1.0	11	<1.0	<1.0	<1.0
	06/08/04	460	NA	NA	1.6	<1.0	1.4	<1.0	2.4 EDC	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	2.5	<1.0	<1.0	5.9	<1.0	<1.0	<1.0
	09/02/04	350	NA	NA	1.3	<1.0	<1.0	<1.0	2.3 EDC	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	01/05/05	540	NA	NA	5.1	<1.0	<1.0	<1.0	3.0 EDC	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.7	<1.0	<1.0

¹ According to the laboratory report, results in the diesel organics range are primarily due to overlap from a gasoline range product.

Table 4: Monitoring Well Analytical Results
4660 Hessel Road, Sebastopol

ID	Date	TPH-g	TPH-d	TPH-mo	B	T	E	X	EDC	MTBE	DIPE	ETBE	TAME	TBA	n-butylbenzene	sec-butylbenzene	Methyl ethyl ketone	Styrene	isopropylbenzene	p-isopropyltoluene	n-propylbenzene	naphthalene	n-propylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Chloroform	
		ug/L																									
MW-5	07/12/99	1,200	ND ²	<100	13	0.89	19	7.3	0.92 EDC	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	10/20/99	760	58	<100	0.86	0.34	34	2.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	01/11/00	<50	<50	<100	1.1	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	04/18/00	ND	ND ¹	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	07/20/00	<50	170 ¹	<200	0.84	0.54	1.1	2.8	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/27/00	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/28/01	<50	54	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/29/01	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/22/01	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/26/01	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/25/02	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/29/02	<50	<50	<200	<0.5	0.59	<0.5	<1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/26/02	<50	NA	NA	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	11/19/02	<50	NA	NA	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	02/19/03	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	05/14/03	<50	NA	NA	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	08/20/03	<50	NA	NA	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	11/20/03	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	03/03/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	06/07/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	09/02/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	01/04/05	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	

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ID	Date	TPH-g	TPH-d	TPH-mo	B	T	E	X	EDC	MTBE	DIPE	ETBE	TAME	TBA	n-butylbenzene	sec-butylbenzene	Methyl ethyl ketone	Styrene	isopropylbenzene	p-isopropyltoluene	naphthalene	n-propylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Chloroform	
		ug/L																								
MW-6	07/12/99	<50	<50	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	10/20/99	<50	<50	<100	0.38	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	01/11/00	650	150	<100	6.7	<0.3	8.3	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	04/18/00	240	200	ND	4.7	1.1	3.6	3.2	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	07/20/00	230	170 ¹	ND	1.4	<0.5	1.8	1.4	<2.0	<2.0	<2.0	<2.0	<2.0	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/27/00	220	59 ¹	<100	1.6	3.1	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/28/01	240	120	<100	1.0	<0.3	4.9	2.9	<0.5	1.4	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/29/01	590	120 ¹	<100	36	<0.3	21	1.6	1.6 EDC	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/22/01	170	110 ¹	<100	9.0	<0.3	6.0	<0.5	<0.5	0.99	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/26/01	390	<50	<100	3.5	<0.3	5.6	<0.5	1.0 EDC	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	
	02/25/02	280	95 ¹	<100	1.3	<0.3	7.5	2.6	<0.5	0.64	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/29/02	110	55 ¹	<200	1.5	0.88	3.3	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	<25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/26/02	910	NA	NA	8.6	<0.3	29	3.2	3.5 EDC	<0.5	NA	NA	NA	<0.5	2.2	<1.0	<0.5	4.8	0.92	3.7	8.3	2.8	2.5	<0.5	<0.5	
	11/19/02	950	NA	NA	8.8	0.38	19	1.6	2.6 EDC	<0.5	NA	NA	NA	<0.5	1.7	1.3	<0.5	4.1	<0.5	4.5	5.3	1.2	0.62	<0.5	<0.5	
	02/19/03	780	NA	NA	8.6	<1.0	5.7	2.5	<1.0	<1.0	NA	NA	NA	<1.0	1.0	<1.0	<1.0	3.5	<1.0	8.8	2.4	3.5	2.2	<1.0	<1.0	
	05/15/03	210	NA	NA	1.1	<0.3	4.4	1.5	<0.5	<0.5	NA	NA	NA	0.9	2.0	2.1	<0.5	0.96	<0.5	2.4	1.7	2.5	1.7	<0.5	<0.5	
	08/21/03	640	NA	NA	5.0	<0.3	17	3.4	<0.5	<0.5	NA	NA	NA	1.2	0.81	<1.0	<0.5	2.4	<0.5	4.9	5.0	3.6	3.3	<0.5	<0.5	
	11/20/03	1300	NA	NA	13	<1.0	27	3.9	<1.0	<1.0	<1.0	<1.0	<1.0	<25	11	2.1	<1.0	<1.0	9.7	<1.0	22	<1.0	5.1	7.8	<1.0	<1.0
	03/03/04	170	NA	NA	<1.0	<1.0	3.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	1.2	1.0	<1.0	<1.0
	06/08/04	120	NA	NA	<1.0	<1.0	2.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.7	1.0	<1.0	<1.0	<1.0
	09/02/04	150	NA	NA	<1.0	<1.0	4.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	01/04/05	260	NA	NA	<1.0	<1.0	2.5	1.0	<1.0	1.2	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	<1.0	<1.0	<1.0

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ID	Date	TPH-g	TPH-d	TPH-mo	B	T	E	X	EDC	MTBE	DIPE	ETBE	TAME	TBA	n-butylbenzene	sec-butylbenzene	Methyl ethyl ketone	Styrene	isopropylbenzene	p-isopropyltoluene	n-propylbenzene	naphthalene	n-propylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Chloroform
		ug/L																								
MW-9D	11/27/00	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/28/01	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/29/01	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/22/01	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/26/01	<50	<50	<100	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/26/02	<50	<50	<100	<0.3	0.32	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/29/02	<50	<50	<200	<0.5	<0.5	<0.5	<1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/27/02	<50	NA	NA	0.44	<0.3	<0.5	0.99	<0.5	<0.5	NA	NA	NA	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	11/20/02	<50	NA	NA	3.0	<0.3	0.71	0.87	<0.5	<0.5	NA	NA	NA	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.54	<0.5	
	02/19/03	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	05/15/03	<50	NA	NA	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.54	<0.5	
	08/15/03	<50	NA	NA	0.42	1.1	0.55	2.2	<0.5	<0.5	NA	NA	NA	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	08/21/03	NA	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	11/21/03	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	03/02/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	06/07/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	09/02/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	01/04/05	74	NA	NA	<1.0	<1.0	<1.0	<1.0	3.1	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.2	<1.0	<1.0	

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		ug/L																									
MW-12	11/27/00	67,000	4,900	<100	2,100	14,000	1,700	8,800	<50	<50	<50	<50	<50	<1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	02/28/01	33,000	1,800	160	1,500	5,700	630	3,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	05/29/01	64,000	2,900 ¹	<100	2,200	7,200	1,000	5,300	19 EDC	<5.0	<5.0	<5.0	<5.0	<100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/24/01	59,000	2,500 ¹	<100	1,700	8,200	1,500	7,400	<50	<50	<50	<50	<50	<100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/27/01	40,000	800	<100	640	5,300	820	3,600	2.8 EDC	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/26/02	23,000	1,400 ¹	<100	1,600	760	660	1,300	<250	<250	<250	<250	<250	<5,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/30/02	16,000	2,000 ¹	<200	2,300	280	790	1,600	<50	<50	<50	<50	<50	<1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/27/02	28,000	NA	NA	2,300	280	2,200	4,000	12 EDC	<5.0	NA	NA	NA	<5.0	18	12	7	74	16	730	250	2,600	520	<5.0			
	11/20/02	28,000	NA	NA	1,000	200	940	1,700	<0.5	<0.5	NA	NA	NA	20	7.9	<1.0	<0.5	45	4.1	420	88	<0.5	260	<0.5			
	02/19/03	14,000	NA	NA	1,200	200	680	920	<25	<25	NA	NA	NA	<25	<25	<25	<25	29	<25	300	94	650	210	<25			
	05/15/03	16,000	NA	NA	2,200	250	1,100	900	<50	<50	NA	NA	NA	<50	<50	<100	<50	78	<50	500	140	950	300	<50			
	08/21/03	18,000	NA	NA	840	340	790	1,200	<250	<250	NA	NA	NA	<250	<250	<500	<250	<250	<250	300	<250	980	270	<250			
	11/21/03	16,000	NA	NA	790	380	810	706	<20	<20	<20	<20	<20	<500	130	<20	<20	<20	37	<20	350	<20	1,100	290	<20		
	03/04/04	7,800	NA	NA	710	180	490	442	<10	<10	<10	<10	<10	<250	<10	<10	<10	<10	26	<10	180	89	700	180	<10		
	06/08/04	7,600	NA	NA	960	820	1,200	1,940	<10	<25	<25	<25	<25	<500	<25	<25	<25	<25	60	<25	480	210	1,600	440	<25		
	09/02/04	11,000	NA	NA	460	720	670	1,185	<25	<25	<25	<25	<25	<500	<25	<25	<25	<25	36	<25	270	140	1,100	300	<25		
	01/05/05	5,500	NA	NA	100	41	130	112	<2.0	<2.0	<2.0	<2.0	<2.0	<50	<2.0	3.0	<2.0	<2.0	9.2	3.8	62	36	240	65	<2.0		

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ID	Date	TPH-g	TPH-d	TPH-mo	B	T	E	X	EDC	MTBE	DIPE	ETBE	TAME	TBA	n-butylbenzene	sec-butylbenzene	Methyl ethyl ketone	Styrene	isopropylbenzene	p-isopropyltoluene	n-propylbenzene	naphthalene	n-propylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Chloroform
		ug/L																								
MW-13D	11/27/00	150	<50	<100	36	0.55	1.1	1.5	3.7 EDC	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/28/01	360	65	<100	110	<0.3	<0.5	<0.5	10 EDC	<0.5	<0.5	<0.5	<0.5	<0.5	26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/29/01	390	<50	<100	100	<0.3	<0.5	<0.5	11 EDC	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/22/01	330 ³	<50	<100	79	<0.3	<0.5	<0.5	15 EDC	<0.5	<0.5	<0.5	<0.5	<0.5	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/26/01	300	<50	<100	67	<0.3	<0.5	0.5	17 EDC	<0.5	<0.5	<0.5	<0.5	<0.5	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/25/02	190	<50	<100	45	1.6	0.58	<0.5	16 EDC	<0.5	<0.5	<0.5	<0.5	<0.5	26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/29/02	72	<50	<200	34	<0.5	<0.5	<1.5	15 EDC	<1.0	<1.0	<1.0	<1.0	<1.0	<25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/26/02	130	NA	NA	20	<0.3	<0.5	<0.5	19 EDC	<0.5	NA	NA	NA	NA	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	11/19/02	130	NA	NA	8.8	<0.3	<0.5	<0.5	22 EDC	<0.5	NA	NA	NA	NA	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	02/19/03	73	NA	NA	5.7	<1.0	<1.0	<1.0	15 EDC	<1.0	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	05/15/03	<50	NA	NA	1.4	<0.3	<0.5	<0.5	19 EDC	<0.5	NA	NA	NA	NA	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	08/21/03	53	NA	NA	0.5	0.77	<0.5	1.4	11 EDC	<0.5	NA	NA	NA	NA	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	11/20/03	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	16 EDC	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	03/02/04	51	NA	NA	<1.0	<1.0	<1.0	<1.0	13 EDC	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	06/08/04	100	NA	NA	<1.0	<1.0	<1.0	<1.0	14 EDC	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	09/02/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	14 EDC	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	01/04/05	65	NA	NA	<1.0	<1.0	<1.0	<1.0	2.1	9.8 EDC	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.9	<1.0	<1.0

³ According to laboratory report, gasoline results are primarily due to the presence of benzene.

**Table 4: Monitoring Well Analytical Results
4660 Hessel Road, Sebastopol**

Table 4: Monitoring Well Analytical Results
4660 Hessel Road, Sebastopol

ID	Date	TPH-g	TPH-d	TPH-mo	B	T	E	X	EDC	MTBE	DIPE	ETBE	TAME	TBA	n-butylbenzene	sec-butylbenzene	Methyl ethyl ketone	Styrene	isopropylbenzene	p-isopropyltoluene	n-propylbenzene	naphthalene	n-propylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Chloroform
		ug/L																								
MW-15D	11/27/00	32,000	2,600	<100	5,900	490	1,200	3,100	91 EDC	<25	<25	<25	<25	<25	<500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/28/01	39,000	2,900	<100	7,500	510	1500	3,500	96 EDC	<0.5	<0.5	<0.5	<0.5	<0.5	650	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/29/01	39,000	840 ¹	<100	6,000	360	940	2,100	80 EDC	<5.0	<5.0	<5.0	<5.0	<5.0	330	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/24/01	45,000	1,700 ¹	<100	6,900	410	1,300	2,900	99 EDC	<50	<50	<50	<50	<50	<1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/26/01	42,000	1700	<100	7900	520	1600	3,600	120 EDC	<50	<50	<50	<50	<50	<1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/26/02	35,000	1,800 ¹	<100	4,800	<300	710	1,300	<500	<500	<500	<500	<500	<500	<10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/30/02	14,000	1,300 ¹	<200	4,600	220	680	1,300	2.1 EDC	<1.0	<1.0	<1.0	<1.0	<1.0	<25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/27/02	32,000	NA	NA	4,300	310	840	1,300	81 EDC	<50	NA	NA	NA	NA	<5.0	9.4	<5.0	<5.0	37	8.8	320	110	550	240	<5.0	
	11/20/02	32,000	NA	NA	4,100	260	660	1,900	67 EDC	<10	NA	NA	NA	NA	12	11	<20	<10	29	<10	360	79	590	180	<10	
	12/30/02 ⁴	15,000	NA	NA	3,700	86	81	310	69 EDC	<0.5	NA	NA	NA	NA	1.4	0.65	<1.0	<0.5	1.4	<0.5	5.1	2.1	48	32	<0.5	
	02/19/03	17,000	NA	NA	4,200	200	660	1200	64 EDC	<1.0	NA	NA	NA	NA	<50	<50	<50	<50	<50	<50	170	53	330	130	<50	
	05/15/03	17,000	NA	NA	5300	200	820	1,000	64 EDC	<0.5	NA	NA	NA	NA	<50	<50	<100	<50	57	<50	220	79	280	130	<50	
	08/21/03	27,000	NA	NA	4300	200	740	1300	<250	<250	NA	NA	NA	NA	<250	<250	<500	<250	<250	<250	<250	<250	<250	<250	<250	
	11/21/03	14,000	NA	NA	4300	190	810	610	<50	<50	<50	<50	<50	<50	<1,000	<50	<50	<50	<50	<50	230	68	470	150	<50	
	03/04/04	11,000	NA	NA	3800	180	660	1,153	50 EDC	<50	<50	<50	<50	<50	<1,000	<50	<50	<50	<50	<50	210	74	380	140	<50	
	06/08/04	9,100	NA	NA	3200	120	580	870	<50	<50	<50	<50	<50	<50	<1,000	<50	<50	<50	<50	<50	180	<50	290	110	<50	
	09/02/04	9,700	NA	NA	4,400	180	850	1,100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	190	68	470	150	<1.0	
	01/04/05	17,000	NA	NA	4,100	140	750	910	<50	<50	<50	<50	<50	<50	<1,000	<50	<50	<50	<50	<50	210	60	360	140	<50	

¹ According to the laboratory report, results in the diesel organics range are primarily due to overlap from a gasoline range product.

⁴ Confirmation sample collected on December 30, 2002, as the sample collected on November 20, 2002 was inadvertently collected from MW-15D and labeled as MW-16.

Table 4: Monitoring Well Analytical Results
4660 Hessel Road, Sebastopol

ID	Date	TPH-g	TPH-d	TPH-mo	B	T	E	X	EDC	MTBE	DIPE	ETBE	TAME	TBA	n-butylbenzene	sec-butylbenzene	Methyl ethyl ketone	Styrene	isopropylbenzene	p-isopropyltoluene	n-propylbenzene	naphthalene	n-propylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Chloroform
		ug/L																								
MW-16	11/27/00	250	<50	<100	16	2.9	1.4	3.3	3.6 EDC	<0.5	<0.5	<0.5	<0.5	<0.5	22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/28/01	300	60	<100	48	0.67	1.5	2.5	3.7 EDC	<0.5	<0.5	<0.5	<0.5	<0.5	46	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/29/01	390	<50	<100	47	<0.3	<0.5	<0.5	3.4 EDC	<0.5	<0.5	<0.5	<0.5	<0.5	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/24/01	550	<50	<100	29	<0.3	0.51	0.61	4.9 EDC	<0.5	<0.5	<0.5	<0.5	<0.5	33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/26/01	370	73	<100	16	0.55	2	3.4	5.9 EDC	<0.5	<0.5	<0.5	<0.5	<0.5	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/26/02	150	<50	<100	15	<0.3	1.2	2.1	2.6 EDC	<0.5	<0.5	<0.5	<0.5	<0.5	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/30/02	72	<50	<200	9.9	0.52	1.6	2.4	2.1 EDC	<1.0	<1.0	<1.0	<1.0	<1.0	<25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/27/02	140	NA	NA	7.3	0.4	1.3	1.3	2.8 EDC	<0.5	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	0.67	<0.5	<0.5	0.79	<0.5	<0.5	<0.5	
	12/30/02 ⁴	200	NA	NA	5.9	<0.3	<0.5	1.2	5.0 EDC	<0.5	NA	NA	NA	NA	<0.5	<0.5	<1.0	<0.5	0.84	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	02/19/03	120	NA	NA	4.5	<1.0	<1.0	<1.0	2.7 EDC	<1.0	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	05/15/03	110	NA	NA	5.4	<0.3	<0.5	<0.5	2.7 EDC	<0.5	NA	NA	NA	NA	<0.5	<0.5	<1.0	<0.5	0.81	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	08/21/03	190	NA	NA	2.8	<1.5	<2.5	<2.5	3.8 EDC	<2.5	NA	NA	NA	NA	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
	11/21/03	190	NA	NA	<1.0	<1.0	<1.0	<1.0	3.8 EDC	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	03/03/04	150	NA	NA	1.5	<1.0	<1.0	<1.0	2.4 EDC	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	06/08/04	180	NA	NA	<1.0	<1.0	<1.0	<1.0	2.9 EDC	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	09/02/04	130	NA	NA	1.2	<1.0	<1.0	<1.0	3.7 EDC	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	01/04/05	230	NA	NA	3.9	<1.0	<1.0	1.5	4.3 EDC	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	

⁴ Confirmation sample collected on December 30, 2002, as the sample collected on November 20, 2002 was inadvertently collected from MW-15D and labeled as MW-16.

Table 4: Monitoring Well Analytical Results
4660 Hessel Road, Sebastopol

ID	Date	TPH-g	TPH-d	TPH-mo	B	T	E	X	EDC	MTBE	DIPE	ETBE	TAME	TBA	n-butylbenzene	sec-butylbenzene	Methyl ethyl ketone	Styrene	isopropylbenzene	p-isopropyltoluene	n-propylbenzene	naphthalene	n-propylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Chloroform
		ug/L																								
MW-17D	03/02/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	06/08/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	09/02/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	01/04/05	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-18	03/02/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	06/08/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	09/02/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	01/04/05	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-19D	03/03/04	<50	NA	NA	<1.0	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	8.5	<1.0	<1.0	<1.0	<1.0	<1.0	
	06/08/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	4.4	<1.0	<1.0	<1.0	<1.0	<1.0	
	09/02/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	01/04/05	78	NA	NA	<1.0	2.2	<1.0	6.9	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.8	1.1	<1.0	
MW-20	03/03/04	7,800	NA	NA	400	2,600	460	3,420	<25	<25	<25	<25	<25	<500	<25	<25	<25	<25	26	<25	250	87	1,100	300	<25	
	06/08/04	14,000	NA	NA	320	1,300	240	1,490	<25	<25	<25	<25	<25	<600	<25	<25	<25	<25	<25	<25	120	47	440	140	<25	
	09/02/04	16,000	NA	NA	340	1,700	350	1,830	<25	<25	<25	<25	<25	<500	36	<25	<25	<25	<25	<25	170	78	840	250	<25	
	01/04/05	15,000	NA	NA	330	1,100	150	1,470	<25	<25	<25	<25	<25	<500	<25	<25	<25	<25	<25	<25	140	51	590	180	<25	
Stand Pipe	03/02/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	06/07/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	09/02/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	01/05/05	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Stream 1	03/02/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Stream 2	03/02/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Stream 3	03/02/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Stream 1	06/07/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Stream 2	06/07/04	<50	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Note: TPH-d and TPH-mo removed from analytical suite for all wells with regulatory concurrence in August 20, 2002 letter.

¹ According to the laboratory report, results in the diesel organics range are primarily due to overlap from a gasoline range product.

² Also ND for TPH-k.

³ According to laboratory report, gasoline results are primarily due to the presence of benzene.

⁴ Confirmation sample collected on December 30, 2002, as the sample collected on November 20, 2002 was inadvertently collected from MW-15D and labeled as MW-16.

APPENDIX A

WELL PURGE RECORDS

SCS ENGINEERS

WELL PURGE RECORD

2004 - 4th Quarter

WELL NUMBER

MW- 1

SCS ENGINEERS

WELL PURGE RECORD

2004 - 4th Quarter

WELL NUMBER

MW-2

SCS ENGINEERS

WELL PURGE RECORD

2004 - 4th Quarter

WELL NUMBER

MW-3

SCS ENGINEERS

WELL PURGE RECORD

2004 - 4th Quarter

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SCS ENGINEERS

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2004 - 4th Quarter

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SCS ENGINEERS

WELL PURGE RECORD

2004 - 4th Quarter

WELL NUMBER

MW-6

SCS ENGINEERS

WELL PURGE RECORD

2004 - 4th Quarter

WELL NUMBER

MW-7D

SCS ENGINEERS

WELL PURGE RECORD

2004 - 4th Quarter

WELL NUMBER

MW- 8

SCS ENGINEERS

WELL PURGE RECORD

2004 - 4th Quarter

WELL NUMBER

MW- 9D

SCS ENGINEERS

WELL PURGE RECORD

2004 - 4th Quarter

WELL NUMBER

MW-10

SCS ENGINEERS

WELL PURGE RECORD

2004 - 4th Quarter

WELL NUMBER

MW-11D

SCS ENGINEERS

WELL PURGE RECORD

2004 - 4th Quarter

WELL NUMBER

MW-12

SCS ENGINEERS

WELL PURGE RECORD

2004 - 4th Quarter

WELL NUMBER

MW-13D

SCS ENGINEERS

WELL PURGE RECORD

2004 - 4th Quarter

WELL NUMBER

MW-14

SCS ENGINEERS

WELL PURGE RECORD

2004 - 4th Quarter

WELL NUMBER

MW-15D

SCS ENGINEERS

WELL PURGE RECORD

2004 - 4th Quarter

WELL NUMBER

MW-16

SCS ENGINEERS

WELL PURGE RECORD

2004 - 4th Quarter

WELL NUMBER

MW-17D

SCS ENGINEERS

WELL PURGE RECORD

2004 - 4th Quarter

WELL NUMBER

MW-18

SCS ENGINEERS

WELL PURGE RECORD

2004 - 4th Quarter

WELL NUMBER

MW-19D

SCS ENGINEERS

WELL PURGE RECORD

2004 - 4th Quarter

WELL NUMBER

MW-20

APPENDIX B

LABORATORY ANALYTICAL REPORTS



Report Date: January 18, 2005

Stephen Knüttel
SCS Engineers
3645 Westwind Blvd.
Santa Rosa, CA 95403

LABORATORY REPORT

Project Name: **Hessel Road** **01203317.00**

Lab Project Number: **5010503**

This 47 page report of analytical data has been reviewed and approved for release.

Mark A. Valentini, Ph.D.
Laboratory Director



TPH Gasoline in Water

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
27621	MW-1	TPH/Gasoline	ND	50
27622	MW-2	TPH/Gasoline	ND	50
27623	MW-3	TPH/Gasoline	ND	50
27624	MW-4	TPH/Gasoline	540	50
27625	MW-5	TPH/Gasoline	ND	50
27626	MW-6	TPH/Gasoline	260	50
27627	MW-7D	TPH/Gasoline	ND	50
27628	MW-8	TPH/Gasoline	ND	50
27629	MW-9D	TPH/Gasoline	74	50
27630	MW-10	TPH/Gasoline	ND	50
27631	MW-11D	TPH/Gasoline	ND	50
27632	MW-12	TPH/Gasoline	5,500	500
27633	MW-13D	TPH/Gasoline	65	50
27634	MW-14	TPH/Gasoline	ND	50
27635	MW-15D	TPH/Gasoline	17,000	500
27636	MW-16	TPH/Gasoline	230	50
27637	MW-17D	TPH/Gasoline	ND	50
27638	MW-18	TPH/Gasoline	ND	50
27639	MW-19D	TPH/Gasoline	78	50
27640	MW-20	TPH/Gasoline	15,000	500
27641	Stand Pipe	TPH/Gasoline	ND	50

Date Sampled: 01/04/05
Date Received: 01/05/05

Date Analyzed: 1/11/05, 1/12/05
Method: EPA 5030/8015M

QC Batch #: 5203



Volatile Hydrocarbons by GC/MS in Water

Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27621	MW-1	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27621	MW-1	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	ND	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	22.1	111	70 – 130
toluene-d ₈ (20)	19.3	96.5	70 – 130
4-bromofluorobenzene (20)	20.0	100	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/5/05	QC Batch #: 5201
Date Received: 01/05/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27622	MW-2	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27622	MW-2	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	ND	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.4	107	70 – 130
toluene-d ₈ (20)	19.4	97.0	70 – 130
4-bromofluorobenzene (20)	20.3	102	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/5/05	QC Batch #: 5201
Date Received: 01/05/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27623	MW-3	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	1.0	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	1.0	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27623	MW-3	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	ND	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.9	110	70 – 130
toluene-d ₈ (20)	19.3	96.5	70 – 130
4-bromofluorobenzene (20)	20.1	100	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/5/05	QC Batch #: 5201
Date Received: 01/05/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27624	MW-4	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	3.0	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	5.1	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27624	MW-4	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	1.7	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.8	109	70 – 130
toluene-d ₈ (20)	19.5	97.5	70 – 130
4-bromofluorobenzene (20)	20.4	102	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/5/05	QC Batch #: 5201
Date Received: 01/05/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27625	MW-5	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27625	MW-5	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	ND	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	20.8	104	70 – 130
toluene-d ₈ (20)	19.3	96.5	70 – 130
4-bromofluorobenzene (20)	20.4	102	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/5/05	QC Batch #: 5201
Date Received: 01/05/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27626	MW-6	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromoform (THM2)	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM3)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM4)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	2.5	1.0
		m,p-xylene	1.0	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM5)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27626	MW-6	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	1.5	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	1.2	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.7	109	70 – 130
toluene-d ₈ (20)	19.3	96.5	70 – 130
4-bromofluorobenzene (20)	20.2	101	70 – 130

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Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27627	MW-7D	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromoform (THM2)	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM3)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM4)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	1.1	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM5)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27627	MW-7D	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	ND	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	22.9	115	70 – 130
toluene-d ₈ (20)	19.5	97.5	70 – 130
4-bromofluorobenzene (20)	20.5	103	70 – 130

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Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27628	MW-8	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27628	MW-8	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	ND	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	22.3	112	70 – 130
toluene-d ₈ (20)	19.3	96.5	70 – 130
4-bromofluorobenzene (20)	20.4	102	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/5/05	QC Batch #: 5201
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Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27629	MW-9D	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	3.1	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27629	MW-9D	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	2.2	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	22.4	112	70 – 130
toluene-d ₈ (20)	19.9	99.5	70 – 130
4-bromofluorobenzene (20)	20.3	102	70 – 130

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Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27630	MW-10	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27630	MW-10	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	ND	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.3	107	70 – 130
toluene-d ₈ (20)	19.2	96.0	70 – 130
4-bromofluorobenzene (20)	20.3	102	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/6/05	QC Batch #: 5201
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Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27631	MW-11D	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	1.0	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27631	MW-11D	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	ND	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.9	110	70 – 130
toluene-d ₈ (20)	19.5	97.5	70 – 130
4-bromofluorobenzene (20)	19.9	99.5	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/6/05	QC Batch #: 5201
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Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27632	MW-12	dichlorodifluoromethane	ND	2.0
		chloromethane	ND	2.0
		vinyl chloride	ND	2.0
		chloroethane	ND	2.0
		bromomethane	ND	2.0
		trichlorofluoromethane	ND	2.0
		1,1-dichloroethene (1,1-DCE)	ND	2.0
		methylene chloride	ND	2.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	2.0
		1,1-dichloroethane (1,1-DCA)	ND	2.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	2.0
		2,2-dichloropropane	ND	2.0
		chloroform (THM1)	ND	2.0
		bromochloromethane	ND	2.0
		1,1,1-trichloroethane (TCA)	ND	2.0
		1,2-dichloroethane (EDC)	ND	2.0
		1,1-dichloropropene	ND	2.0
		carbon tetrachloride	ND	2.0
		benzene	100	2.0
		trichloroethene (TCE)	ND	2.0
		1,2-dichloropropane (DCP)	ND	2.0
		dibromomethane	ND	2.0
		bromodichloromethane (THM2)	ND	2.0
		cis-1,3-dichloropropene	ND	2.0
		toluene	41	2.0
		1,1,2-trichloroethane	ND	2.0
		1,3-dichloropropane	ND	2.0
		dibromochloromethane (THM3)	ND	2.0
		tetrachloroethene (PCE)	ND	2.0
		1,2-dibromoethane (EDB)	ND	2.0
		chlorobenzene	ND	2.0
		1,1,1,2-tetrachloroethane	ND	2.0
		ethyl benzene	130	2.0
		m,p-xylene	100	2.0
		styrene	ND	2.0
		o-xylene	12	2.0
		bromoform (THM4)	ND	2.0
		1,1,2,2-tetrachloroethane	ND	2.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27632	MW-12	isopropyl benzene	9.2	2.0
		1,2,3-trichloropropane	ND	2.0
		bromobenzene	ND	2.0
		n-propyl benzene	36	2.0
		2-chlorotoluene	ND	2.0
		4-chlorotoluene	ND	2.0
		1,3,5-trimethylbenzene	65	2.0
		tert-butylbenzene	ND	2.0
		1,2,4-trimethylbenzene	240	2.0
		sec-butylbenzene	3.0	2.0
		1,3-dichlorobenzene	ND	2.0
		1,4-dichlorobenzene	ND	2.0
		1,2-dichlorobenzene	ND	2.0
		p-isopropyltoluene	3.8	2.0
		n-butylbenzene	ND	2.0
		1,2,4-trichlorobenzene	ND	2.0
		naphthalene	62	2.0
		hexachlorobutadiene	ND	2.0
		1,2,3-trichlorobenzene	ND	2.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	50
methyl tert-butyl ether (MTBE)	ND	2.0
di-isopropyl ether (DIPE)	ND	2.0
ethyl tert-butyl ether (ETBE)	ND	2.0
tert-amyl methyl ether (TAME)	ND	2.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	20.9	105	70 – 130
toluene-d ₈ (20)	19.7	98.5	70 – 130
4-bromofluorobenzene (20)	20.2	101	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/13/05	QC Batch #: 5201
Date Received: 01/05/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27633	MW-13D	dichlorodifluoromethane	ND	1.0
		Chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		Chloroethane	ND	1.0
		Bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	9.8	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	2.1	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27633	MW-13D	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	1.9	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	22.8	114	70 – 130
toluene-d ₈ (20)	19.7	98.5	70 – 130
4-bromofluorobenzene (20)	20.3	102	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/6/05	QC Batch #: 5201
Date Received: 01/05/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27634	MW-14	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromoform (THM2)	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM3)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM4)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	1.3	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM5)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27634	MW-14	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	ND	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	22.6	113	70 – 130
toluene-d ₈ (20)	19.6	98.0	70 – 130
4-bromofluorobenzene (20)	20.0	100	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/6/05	QC Batch #: 5201
Date Received: 01/05/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27635	MW-15D	dichlorodifluoromethane	ND	50
		chloromethane	ND	50
		vinyl chloride	ND	50
		chloroethane	ND	50
		bromomethane	ND	50
		trichlorofluoromethane	ND	50
		1,1-dichloroethene (1,1-DCE)	ND	50
		methylene chloride	ND	50
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	50
		1,1-dichloroethane (1,1-DCA)	ND	50
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	50
		2,2-dichloropropane	ND	50
		chloroform (THM1)	ND	50
		bromochloromethane	ND	50
		1,1,1-trichloroethane (TCA)	ND	50
		1,2-dichloroethane (EDC)	ND	50
		1,1-dichloropropene	ND	50
		carbon tetrachloride	ND	50
		benzene	4,100	50
		trichloroethene (TCE)	ND	50
		1,2-dichloropropane (DCP)	ND	50
		dibromomethane	ND	50
		bromodichloromethane (THM2)	ND	50
		cis-1,3-dichloropropene	ND	50
		toluene	140	50
		1,1,2-trichloroethane	ND	50
		1,3-dichloropropane	ND	50
		dibromochloromethane (THM3)	ND	50
		tetrachloroethene (PCE)	ND	50
		1,2-dibromoethane (EDB)	ND	50
		chlorobenzene	ND	50
		1,1,1,2-tetrachloroethane	ND	50
		ethyl benzene	750	50
		m,p-xylene	910	50
		styrene	ND	50
		o-xylene	ND	50
		bromoform (THM4)	ND	50
		1,1,2,2-tetrachloroethane	ND	50



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27635	MW-15D	isopropyl benzene	ND	50
		1,2,3-trichloropropane	ND	50
		bromobenzene	ND	50
		n-propyl benzene	60	50
		2-chlorotoluene	ND	50
		4-chlorotoluene	ND	50
		1,3,5-trimethylbenzene	140	50
		tert-butylbenzene	ND	50
		1,2,4-trimethylbenzene	360	50
		sec-butylbenzene	ND	50
		1,3-dichlorobenzene	ND	50
		1,4-dichlorobenzene	ND	50
		1,2-dichlorobenzene	ND	50
		p-isopropyltoluene	ND	50
		n-butylbenzene	ND	50
		1,2,4-trichlorobenzene	ND	50
		naphthalene	210	50
		hexachlorobutadiene	ND	50
		1,2,3-trichlorobenzene	ND	50

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	1,000
methyl tert-butyl ether (MTBE)	ND	50
di-isopropyl ether (DIPE)	ND	50
ethyl tert-butyl ether (ETBE)	ND	50
tert-amyl methyl ether (TAME)	ND	50

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	20.4	102	70 – 130
toluene-d ₈ (20)	18.9	94.5	70 – 130
4-bromofluorobenzene (20)	20.5	103	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/6/05	QC Batch #: 5201
Date Received: 01/05/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27636	MW-16	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	4.3	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	3.9	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	1.5	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27636	MW-16	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	ND	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	22.6	113	70 – 130
toluene-d ₈ (20)	19.2	96.0	70 – 130
4-bromofluorobenzene (20)	20.3	102	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/6/05	QC Batch #: 5201
Date Received: 01/05/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27637	MW-17D	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27637	MW-17D	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	ND	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	22.6	113	70 – 130
toluene-d ₈ (20)	18.9	94.5	70 – 130
4-bromofluorobenzene (20)	20.3	102	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/6/05	QC Batch #: 5201
Date Received: 01/05/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27638	MW-18	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27638	MW-18	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	ND	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.4	107	70 – 130
toluene-d ₈ (20)	19.2	96.0	70 – 130
4-bromofluorobenzene (20)	20.5	103	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/6/05	QC Batch #: 5201
Date Received: 01/05/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27639	MW-19D	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	2.2	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	5.3	1.0
		styrene	ND	1.0
		o-xylene	1.6	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27639	MW-19D	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	1.1	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	2.8	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	22.9	115	70 – 130
toluene-d ₈ (20)	19.4	97.0	70 – 130
4-bromofluorobenzene (20)	20.2	101	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/6/05	QC Batch #: 5201
Date Received: 01/05/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27640	MW-20	dichlorodifluoromethane	ND	25
		chloromethane	ND	25
		vinyl chloride	ND	25
		chloroethane	ND	25
		bromomethane	ND	25
		trichlorofluoromethane	ND	25
		1,1-dichloroethene (1,1-DCE)	ND	25
		methylene chloride	ND	25
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	25
		1,1-dichloroethane (1,1-DCA)	ND	25
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	25
		2,2-dichloropropane	ND	25
		chloroform (THM1)	ND	25
		bromochloromethane	ND	25
		1,1,1-trichloroethane (TCA)	ND	25
		1,2-dichloroethane (EDC)	ND	25
		1,1-dichloropropene	ND	25
		carbon tetrachloride	ND	25
		benzene	330	25
		trichloroethene (TCE)	ND	25
		1,2-dichloropropane (DCP)	ND	25
		dibromomethane	ND	25
		bromodichloromethane (THM2)	ND	25
		cis-1,3-dichloropropene	ND	25
		toluene	1,100	25
		1,1,2-trichloroethane	ND	25
		1,3-dichloropropane	ND	25
		dibromochloromethane (THM3)	ND	25
		tetrachloroethene (PCE)	ND	25
		1,2-dibromoethane (EDB)	ND	25
		chlorobenzene	ND	25
		1,1,1,2-tetrachloroethane	ND	25
		ethyl benzene	150	25
		m,p-xylene	1,100	25
		styrene	ND	25
		o-xylene	370	25
		bromoform (THM4)	ND	25
		1,1,2,2-tetrachloroethane	ND	25



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27640	MW-20	isopropyl benzene	ND	25
		1,2,3-trichloropropane	ND	25
		bromobenzene	ND	25
		n-propyl benzene	51	25
		2-chlorotoluene	ND	25
		4-chlorotoluene	ND	25
		1,3,5-trimethylbenzene	180	25
		tert-butylbenzene	ND	25
		1,2,4-trimethylbenzene	590	25
		sec-butylbenzene	ND	25
		1,3-dichlorobenzene	ND	25
		1,4-dichlorobenzene	ND	25
		1,2-dichlorobenzene	ND	25
		p-isopropyltoluene	ND	25
		n-butylbenzene	ND	25
		1,2,4-trichlorobenzene	ND	25
		naphthalene	140	25
		hexachlorobutadiene	ND	25
		1,2,3-trichlorobenzene	ND	25

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	500
methyl tert-butyl ether (MTBE)	ND	25
di-isopropyl ether (DIPE)	ND	25
ethyl tert-butyl ether (ETBE)	ND	25
tert-amyl methyl ether (TAME)	ND	25

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.6	108	70 – 130
toluene-d ₈ (20)	19.6	98.0	70 – 130
4-bromofluorobenzene (20)	20.3	102	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/6/05	QC Batch #: 5201
Date Received: 01/05/05	Method: EPA 8260B	



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27641	Stand Pipe	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromoform (THM2)	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM3)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM4)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM5)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27641	Stand Pipe	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	ND	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	20.4	102	70 – 130
toluene-d ₈ (20)	19.0	95.0	70 – 130
4-bromofluorobenzene (20)	19.8	99.0	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/6/05	QC Batch #: 5201
Date Received: 01/05/05	Method: EPA 8260B	



LABORATORY

QUALITY ASSURANCE REPORT

QC Batch #: 5203

Lab Project #: 5010503

Sample ID	Compound	Result (ug/L)
MB	TPH/Gas	ND
MB	MTBE	ND
MB	Benzene	ND
MB	Toluene	ND
MB	Ethyl Benzene	ND
MB	Xylenes	ND

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.
27621	CMS	TPH/Gas		NS	
	CMS	Benzene	9.15	10.0	91.5
	CMS	Toluene	9.14	10.0	91.4
	CMS	Ethyl Benzene	9.58	10.0	95.8
	CMS	Xylenes	27.2	30.0	90.8

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.	RPD
27621	CMSD	TPH/Gas		NS		
	CMSD	Benzene	9.15	10.0	91.5	0.01
	CMSD	Toluene	9.15	10.0	91.5	0.01
	CMSD	Ethyl Benzene	9.52	10.0	95.2	0.69
	CMSD	Xylenes	27.7	30.0	92.5	1.9

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range; NR = No Recovery



QC Batch #: 5201

Lab Project #: 5010503

Sample ID	Compound Name	Result (ug/L)
MB	1,1-dichloroethene	ND
MB	benzene	ND
MB	trichloroethene	ND
MB	toluene	ND
MB	chlorobenzene	ND

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	20.7	104	70 – 130
toluene-d ₈ (20)	18.7	93.5	70 – 130
4-bromofluorobenzene (20)	20.0	100	70 – 130

Sample #	Sample ID	Compound Name	Result (ug/L)	Spike Level	% Recv.
27612	CMS	1,1-dichloroethene	24.3	25.0	97.2
	CMS	benzene	25.5	25.0	102
	CMS	trichloroethene	21.0	25.0	84.0
	CMS	toluene	24.1	25.0	96.1
	CMS	chlorobenzene	25.5	25.0	102

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.8	109	70 – 130
toluene-d ₈ (20)	19.4	97.0	70 – 130
4-bromofluorobenzene (20)	19.9	99.5	70 – 130



Sample #	Sample ID	Compound Name	Result (ug/L)	Spike Level	% Recv.	RPD
27612	CMSD	1,1-dichloroethene	23.6	25.0	94.4	2.9
	CMSD	benzene	24.1	25.0	96.4	5.7
	CMSD	trichloroethene	19.6	25.0	78.4	6.9
	CMSD	toluene	22.9	25.0	91.6	5.1
	CMSD	chlorobenzene	24.3	25.0	97.2	4.8

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	23.0	115	70 – 130
toluene-d ₈ (20)	19.5	97.5	70 – 130
4-bromofluorobenzene (20)	19.8	99.0	70 – 130

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range; NR = No Recovery



Analytical Sciences

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CLIENT INFORMATION

COMPANY NAME: SCS ENGINEERS	BILLING INFORMATION		
ADDRESS: 3645 WESTWIND BOULEVARD	CONTACT: John Riddle	COMPANY NAME: 4660 Hessel Road	SCS ENGINEERS PROJECT NAME: Hessel Road
SANTA ROSA, CA 95403	ADDRESS: Sebestepol CA 95412	SCS ENGINEERS PROJECT NUMBER: 01203379 CO	
CONTACT: STEPHEN KNUTTEL	PHONE#: (707) 546-9461	TURNAROUND TIME (check one)	GEOTRACKER EDF: X Y N
PHONE#: (707) 544-5769	FAX #: (707) 544-5769	SAME DAY	GLOBAL ID: 1410200318
		48 HOURS	COOLER TEMPERATURE
		5 DAYS	72 HOURS
		NORMAL	C
		X	X

LAB PROJECT NUMBER: 501053

ITEM	CLIENT SAMPLE I.D.	DATE SAMPLED	TIME	MATRIX	# CONT.	PRESV. YES/NO	ANALYSIS			TOTAL LEAD	CAM 17 METALS / 5 LUFT METALS / PCB'S / PESTICIDES / CGB'S	COMMENTS	LAB SAMPLE #	
							TPH/GAS/TPX	TPH DIESEL / MOTOR OIL	VOLATILE HYDROCARBONS EPA 8260 (FUEL LIST)					
1	MW-13	1/5	1100	LQ	4	Yes	x	x					27632	
2	MW-13D	1/4	210	LQ	4	Yes	x	x					27633	
3	MW-14	1/4	215	LQ	4	Yes	x	x					27634	
4	MN-15D	1/4	315	LQ	4	Yes	x	x					27635	
5	MW-16	1/4	325	LQ	4	Yes	x	x					27636	
6	MW-17D	1/4	1320	LQ	4	Yes	x	x					27637	
7	MN-18	1/4	1225	LQ	4	Yes	x	x					27638	
8	MW-19D	1/4	105	LQ	4	Yes	x	x					27639	
9	MW-20	1/4	1250	LQ	4	Yes	x	x					27640	
10	STAND PIPE	1/5	1120	LQ	4	Yes	x	x					27641	
11														

SIGNATURES

RELINQUISHED BY: <u>Dawn Gruelle</u>	DATE:: 1/5/05	TIME: 1143	RECEIVED BY LABORATORY:
RECEIVED BY:	DATE::	TIME:	<u>J. Knuttel</u>
RELINQUISHED BY:	DATE::	TIME:	1/5/05
RECEIVED BY:	DATE::	TIME:	1143



Report Date: January 18, 2005

Stephen Knüttel
SCS Engineers
3645 Westwind Blvd.
Santa Rosa, CA 95403

LABORATORY REPORT

Project Name: **Hessel Road** **01203317.00**

Lab Project Number: **5010504**

This 7 page report of analytical data has been reviewed and approved for release.

Mark A. Valentini, Ph.D.
Laboratory Director



TPH Gasoline in Water

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)	
27642	DW-HD2	TPH/Gasoline	ND	50	
Date Sampled:	01/04/05	Date Analyzed:	1/11/05	QC Batch #:	5203
Date Received:	01/05/05	Method:	EPA 5030/8015M		



Volatile Hydrocarbons by GC/MS in Water

Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27642	DW-HD2	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27642	DW-HD2	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	ND	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	22.1	111	70 – 130
toluene-d ₈ (20)	19.3	96.5	70 – 130
4-bromofluorobenzene (20)	19.9	99.5	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/6/05	QC Batch #: 5204
Date Received: 01/05/05	Method: EPA 8260B	



LABORATORY

QUALITY ASSURANCE REPORT

QC Batch #: 5203

Lab Project #: 5010504

Sample ID	Compound	Result (ug/L)
MB	TPH/Gas	ND
MB	MTBE	ND
MB	Benzene	ND
MB	Toluene	ND
MB	Ethyl Benzene	ND
MB	Xylenes	ND

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.
27621	CMS	TPH/Gas		NS	
	CMS	Benzene	9.15	10.0	91.5
	CMS	Toluene	9.15	10.0	91.4
	CMS	Ethyl Benzene	9.58	10.0	95.8
	CMS	Xylenes	27.2	30.0	90.8

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.	RPD
27621	CMSD	TPH/Gas		NS		
	CMSD	Benzene	9.15	10.0	91.5	0.01
	CMSD	Toluene	9.15	10.0	91.5	0.01
	CMSD	Ethyl Benzene	9.52	10.0	95.2	0.69
	CMSD	Xylenes	27.2	30.0	92.5	1.9

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range; NR = No Recovery



QC Batch #: 5204

Lab Project #: 5010504

Sample ID	Compound Name	Result (ug/L)
MB	1,1-dichloroethene	ND
MB	benzene	ND
MB	trichloroethene	ND
MB	toluene	ND
MB	chlorobenzene	ND

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.0	105	70 – 130
toluene-d ₈ (20)	19.1	95.5	70 – 130
4-bromofluorobenzene (20)	19.7	98.5	70 – 130

Sample #	Sample ID	Compound Name	Result (ug/L)	Spike Level	% Recv.
27644	CMS	1,1-dichloroethene	25.3	25.0	101
	CMS	benzene	24.4	25.0	97.6
	CMS	trichloroethene	19.3	25.0	77.2
	CMS	toluene	22.9	25.0	91.6
	CMS	chlorobenzene	24.1	25.0	96.4

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.6	108	70 – 130
toluene-d ₈ (20)	19.2	96.0	70 – 130
4-bromofluorobenzene (20)	20.4	102	70 – 130



Sample #	Sample ID	Compound Name	Result (ug/L)	Spike Level	% Recv.	RPD
27644	CMSD	1,1-dichloroethene	28.0	25.0	112	10
	CMSD	benzene	24.9	25.0	99.6	2.0
	CMSD	trichloroethene	19.9	25.0	79.6	3.1
	CMSD	toluene	23.1	25.0	91.6	0.87
	CMSD	chlorobenzene	24.9	25.0	99.6	3.3

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	22.6	113	70 – 130
toluene-d ₈ (20)	18.7	93.5	70 – 130
4-bromofluorobenzene (20)	20.0	100	70 – 130

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range; NR = No Recovery



Analytical Sciences

Analytical Sciences
P.O. Box 750336, Petaluma, CA 94975-0336
110 Liberty Street, Petaluma, CA 94952
(707) 769-3128



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5010504

LAB PROJECT NUMBER:

CLIENT INFORMATION		BILLING INFORMATION	
COMPANY NAME: SCS ENGINEERS	CONTACT: John Riddle	COMPANY NAME: HESSEL ROAD	SCS ENGINEERS PROJECT NAME: Hessel Road
ADDRESS: 3645 WESTWIND BOULEVARD	ADDRESS: 5010504 CA 95403	MOBILE LAB	SCS ENGINEERS PROJECT NUMBER: 01603317.00
SANTA ROSA, CA 95403	STEPHEN KNUTTE	SAME DAY	TURNAROUND TIME (check one)
CONTACT: STEPHEN KNUTTE	PHONE#: (707) 546-9461	48 HOURS	24 Hours
FAX #: (707) 544-5769	FAX #:	5 DAYS	72 Hours

SCS ENGINEERS PROJECT NAME: HESSEL ROAD	SCS ENGINEERS PROJECT NUMBER: 01603317.00
TURNAROUND TIME (check one)	
MOBILE LAB	SAME DAY
48 HOURS	72 Hours
5 DAYS	NORMAL
COOLER TEMPERATURE	
°C	
COC	

ITEM	CLIENT SAMPLE I.D.	DATE SAMPLED	TIME	MATRIX	#	PRESV. YES/NO	ANALYSIS		
							TOTAL LEAD	COMMENTS	LAB SAMPLE #
1	DN-HD3	1/4	120	LQ	4	YES			27642
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									

RELINQUISHED BY:	DATE:: 1/5/05	TIME: 1141	SIGNATURES
RECEIVED BY:	DATE::	TIME::	RECEIVED BY LABORATORY:
RELINQUISHED BY:	DATE::	TIME::	DATE: 1/5/05
RECEIVED BY:	DATE::	TIME::	TIME: 1143



Report Date: January 18, 2005

Stephen Knüttel
SCS Engineers
3645 Westwind Blvd.
Santa Rosa, CA 95403

LABORATORY REPORT

Project Name: **Hessel Road** **01203317.00**

Lab Project Number: **5010505**

This 7 page report of analytical data has been reviewed and approved for release.

Mark A. Valentini, Ph.D.
Laboratory Director



TPH Gasoline in Water

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)	
27643	DW-MB	TPH/Gasoline	ND	50	
Date Sampled:	01/04/05	Date Analyzed:	1/11/05	QC Batch #:	5203
Date Received:	01/05/05	Method:	EPA 5030/8015M		



Volatile Hydrocarbons by GC/MS in Water

Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27643	DW-MB	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27643	DW-MB	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	ND	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	22.2	111	70 – 130
toluene-d ₈ (20)	18.9	94.5	70 – 130
4-bromofluorobenzene (20)	19.9	99.5	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/6/05	QC Batch #: 5204
Date Received: 01/05/05	Method: EPA 8260B	



LABORATORY

QUALITY ASSURANCE REPORT

QC Batch #: 5203

Lab Project #: 5010505

Sample ID	Compound	Result (ug/L)
MB	TPH/Gas	ND
MB	MTBE	ND
MB	Benzene	ND
MB	Toluene	ND
MB	Ethyl Benzene	ND
MB	Xylenes	ND

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.
27621	CMS	TPH/Gas		NS	
	CMS	Benzene	9.15	10.0	91.5
	CMS	Toluene	9.15	10.0	91.4
	CMS	Ethyl Benzene	9.58	10.0	95.8
	CMS	Xylenes	27.2	30.0	90.8

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.	RPD
27621	CMSD	TPH/Gas		NS		
	CMSD	Benzene	9.15	10.0	91.5	0.01
	CMSD	Toluene	9.15	10.0	91.4	0.01
	CMSD	Ethyl Benzene	9.52	10.0	95.8	0.69
	CMSD	Xylenes	27.2	30.0	92.5	1.9

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range; NR = No Recovery



QC Batch #: 5204

Lab Project #: 5010505

Sample ID	Compound Name	Result (ug/L)
MB	1,1-dichloroethene	ND
MB	benzene	ND
MB	trichloroethene	ND
MB	toluene	ND
MB	chlorobenzene	ND

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.0	105	70 – 130
toluene-d ₈ (20)	19.1	95.5	70 – 130
4-bromofluorobenzene (20)	19.7	98.5	70 – 130

Sample #	Sample ID	Compound Name	Result (ug/L)	Spike Level	% Recv.
27644	CMS	1,1-dichloroethene	25.3	25.0	101
	CMS	benzene	24.4	25.0	97.6
	CMS	trichloroethene	19.3	25.0	77.2
	CMS	toluene	22.9	25.0	91.6
	CMS	chlorobenzene	24.1	25.0	96.4

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.6	108	70 – 130
toluene-d ₈ (20)	19.2	96.0	70 – 130
4-bromofluorobenzene (20)	20.4	102	70 – 130



Sample #	Sample ID	Compound Name	Result (ug/L)	Spike Level	% Recv.	RPD
27644	CMSD	1,1-dichloroethene	28.0	25.0	112	10
	CMSD	benzene	24.9	25.0	99.6	2.0
	CMSD	trichloroethene	19.9	25.0	79.6	3.1
	CMSD	toluene	23.1	25.0	91.6	0.87
	CMSD	chlorobenzene	24.9	25.0	99.6	3.3

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	22.6	113	70 – 130
toluene-d ₈ (20)	18.7	93.5	70 – 130
4-bromofluorobenzene (20)	20.0	100	70 – 130

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range; NR = No Recovery



Analytical Sciences

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110 Liberty Street, Petaluma, CA 94952
(707) 769-3128

CLIENT INFORMATION		BILLING INFORMATION	
COMPANY NAME:	SCS ENGINEERS	CONTACT:	John Riddle!!
ADDRESS:	3645 WESTWIND BOULEVARD SANTA ROSA, CA 95403	COMPANY NAME:	HOLO Hessel Road
CONTACT:	SIEAHEN KNUTTEL	ADDRESS:	Selbstgeocell CA 95442
PHONE#:	(707) 546-9461	PHONE#:	707 833-1976
FAX #:	(707) 544-5769	FAX #:	

LAB PROJECT NUMBER:	5010505		
SCS ENGINEERS PROJECT NAME:	Hessel Field		
SCS ENGINEERS PROJECT NUMBER:	0103317.00		
TURNAROUND TIME (check one)			
MOBILE LAB	_____		
SAME DAY	24 HOURS _____		
48 HOURS	72 HOURS _____		
5 DAYS	NORMAL _____		
COOLER TEMPERATURE _____ °C			
GLOBAL ID: Tk(67)00.318			
GeoTRACKER EDF: X Y N			

SIGNATURES			
RELINQUISHED BY:	DATE: 1/5/05	TIME: 1141	RECEIVED BY LABORATORY:
RECEIVED BY:	DATE:	TIME:	
RELINQUISHED BY:	DATE:	TIME:	SIGNATURE
RECEIVED BY:	DATE:	TIME:	

TIME 143 DATE 1/5/05



Report Date: January 18, 2005

Stephen Knüttel
SCS Engineers
3645 Westwind Blvd.
Santa Rosa, CA 95403

LABORATORY REPORT

Project Name: **Hessel Road** **01203317.00**

Lab Project Number: **5010506**

This 7 page report of analytical data has been reviewed and approved for release.

Mark A. Valentini, Ph.D.
Laboratory Director



TPH Gasoline in Water

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)	
27644	DW-1	TPH/Gasoline	ND	50	
Date Sampled:	01/04/05	Date Analyzed:	1/11/05	QC Batch #:	5203
Date Received:	01/05/05	Method:	EPA 5030/8015M		



Volatile Hydrocarbons by GC/MS in Water

Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27644	DW-1	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27644	DW-1	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	ND	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	23.9	120	70 – 130
toluene-d ₈ (20)	19.5	97.5	70 – 130
4-bromofluorobenzene (20)	19.6	98.0	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/6/05	QC Batch #: 5204
Date Received: 01/05/05	Method: EPA 8260B	



LABORATORY

QUALITY ASSURANCE REPORT

QC Batch #: 5203

Lab Project #: 5010506

Sample ID	Compound	Result (ug/L)
MB	TPH/Gas	ND
MB	MTBE	ND
MB	Benzene	ND
MB	Toluene	ND
MB	Ethyl Benzene	ND
MB	Xylenes	ND

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.
27621	CMS	TPH/Gas		NS	
	CMS	Benzene	9.15	10.0	91.5
	CMS	Toluene	9.14	10.0	91.4
	CMS	Ethyl Benzene	9.58	10.0	95.8
	CMS	Xylenes	27.2	30.0	90.8

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.	RPD
27621	CMSD	TPH/Gas		NS		
	CMSD	Benzene	9.15	10.0	91.5	0.01
	CMSD	Toluene	9.14	10.0	91.4	0.01
	CMSD	Ethyl Benzene	9.58	10.0	95.8	0.69
	CMSD	Xylenes	27.2	30.0	92.5	1.9

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range; NR = No Recovery



QC Batch #: 5204

Lab Project #: 5010506

Sample ID	Compound Name	Result (ug/L)
MB	1,1-dichloroethene	ND
MB	benzene	ND
MB	trichloroethene	ND
MB	toluene	ND
MB	chlorobenzene	ND

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.0	105	70 – 130
toluene-d ₈ (20)	19.1	95.5	70 – 130
4-bromofluorobenzene (20)	19.7	98.5	70 – 130

Sample #	Sample ID	Compound Name	Result (ug/L)	Spike Level	% Recv.
27644	CMS	1,1-dichloroethene	25.3	25.0	101
	CMS	benzene	24.4	25.0	97.6
	CMS	trichloroethene	19.3	25.0	77.2
	CMS	toluene	22.9	25.0	91.6
	CMS	chlorobenzene	24.1	25.0	96.4

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.6	108	70 – 130
toluene-d ₈ (20)	19.2	96.0	70 – 130
4-bromofluorobenzene (20)	20.4	102	70 – 130



Sample #	Sample ID	Compound Name	Result (ug/L)	Spike Level	% Recv.	RPD
27644	CMSD	1,1-dichloroethene	28.0	25.0	112	10
	CMSD	benzene	24.9	25.0	99.6	2.0
	CMSD	trichloroethene	19.9	25.0	79.6	3.1
	CMSD	toluene	23.1	25.0	91.6	0.87
	CMSD	chlorobenzene	24.9	25.0	99.6	3.3

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	22.6	113	70 – 130
toluene-d ₈ (20)	18.7	93.5	70 – 130
4-bromofluorobenzene (20)	20.0	100	70 – 130

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range; NR = No Recovery



Report Date: January 18, 2005

Stephen Knüttel
SCS Engineers
3645 Westwind Blvd.
Santa Rosa, CA 95403

LABORATORY REPORT

Project Name: **Hessel Road** **01203317.00**

Lab Project Number: **5010507**

This 7 page report of analytical data has been reviewed and approved for release.

Mark A. Valentini, Ph.D.
Laboratory Director



TPH Gasoline in Water

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)	
27645	DW-4	TPH/Gasoline	ND	50	
Date Sampled:	01/04/05	Date Analyzed:	1/11/05	QC Batch #:	5203
Date Received:	01/05/05	Method:	EPA 5030/8015M		



Volatile Hydrocarbons by GC/MS in Water

Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27645	DW-4	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27645	DW-4	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	ND	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	23.4	117	70 – 130
toluene-d ₈ (20)	18.8	94.0	70 – 130
4-bromofluorobenzene (20)	19.9	99.5	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/6/05	QC Batch #: 5204
Date Received: 01/05/05	Method: EPA 8260B	



LABORATORY

QUALITY ASSURANCE REPORT

QC Batch #: 5203

Lab Project #: 5010507

Sample ID	Compound	Result (ug/L)
MB	TPH/Gas	ND
MB	MTBE	ND
MB	Benzene	ND
MB	Toluene	ND
MB	Ethyl Benzene	ND
MB	Xylenes	ND

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.
27621	CMS	TPH/Gas		NS	
	CMS	Benzene	9.15	10.0	91.5
	CMS	Toluene	9.14	10.0	91.4
	CMS	Ethyl Benzene	9.58	10.0	95.8
	CMS	Xylenes	27.2	30.0	90.8

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.	RPD
27621	CMSD	TPH/Gas		NS		
	CMSD	Benzene	9.15	10.0	91.5	0.01
	CMSD	Toluene	9.14	10.0	91.4	0.01
	CMSD	Ethyl Benzene	9.58	10.0	95.8	0.69
	CMSD	Xylenes	27.2	30.0	92.5	1.9

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range; NR = No Recovery



QC Batch #: 5204

Lab Project #: 5010507

Sample ID	Compound Name	Result (ug/L)
MB	1,1-dichloroethene	ND
MB	benzene	ND
MB	trichloroethene	ND
MB	toluene	ND
MB	chlorobenzene	ND

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.0	105	70 – 130
toluene-d ₈ (20)	19.1	95.5	70 – 130
4-bromofluorobenzene (20)	19.7	98.5	70 – 130

Sample #	Sample ID	Compound Name	Result (ug/L)	Spike Level	% Recv.
27644	CMS	1,1-dichloroethene	25.3	25.0	101
	CMS	benzene	24.4	25.0	97.6
	CMS	trichloroethene	19.3	25.0	77.2
	CMS	toluene	22.9	25.0	91.6
	CMS	chlorobenzene	24.1	25.0	96.4

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.6	108	70 – 130
toluene-d ₈ (20)	19.2	96.0	70 – 130
4-bromofluorobenzene (20)	20.4	102	70 – 130



Sample #	Sample ID	Compound Name	Result (ug/L)	Spike Level	% Recv.	RPD
27644	CMSD	1,1-dichloroethene	28.0	25.0	112	10
	CMSD	benzene	24.9	25.0	99.6	2.0
	CMSD	trichloroethene	19.9	25.0	79.6	3.1
	CMSD	toluene	23.1	25.0	91.6	0.87
	CMSD	chlorobenzene	24.9	25.0	99.6	3.3

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	22.6	113	70 – 130
toluene-d ₈ (20)	18.7	93.5	70 – 130
4-bromofluorobenzene (20)	20.0	100	70 – 130

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range; NR = No Recovery



Analytical Sciences

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(707) 769-3128



P.O. Box 750336, Petaluma, CA 94975-0336
110 Liberty Street, Petaluma, CA 94952
(707) 769-3128

CLIENT INFORMATION

COMPANY NAME: SCS ENGINEERS	BILLING INFORMATION		
ADDRESS: 3645 WESTWIND BOULEVARD	CONTACT: John Riedel	COMPANY NAME: Hessel Road	
SANTA ROSA, CA 95403	ADDRESS: 500 Hessel Road	PHONE#: (707) 546-9461	FAX #: (707) 544-5769
CONTACT: STEPHEN KNUTTEL			

LAB PROJECT NUMBER: SCS10507

SCS ENGINEERS PROJECT NAME: <u>Hessel Road</u>	SCS ENGINEERS PROJECT NUMBER: <u>04053777</u>
TURNAROUND TIME (check one)	
MOBILE LAB	SAME DAY
48 HOURS	5 DAYS
72 HOURS	NORMAL
COOLER TEMPERATURE	
COC	

ITEM	CLIENT SAMPLE I.D.	DATE SAMPLED	TIME	MATRIX	# CONT.	PRESV. YES/NO	ANALYSIS			COMMENTS	LAB SAMPLE #
							TOTAL LEAD	5 LUMFT METALS /	CA/M 7 METALS /		
1	DN-4	1/4	130	LQ	4	YES	X	X		27645	
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											

SIGNATURES

RELINQUISHED BY: <u>John Riedel</u>	DATE: <u>1/5/05</u>	TIME: <u>1141</u>	RECEIVED BY LABORATORY: <u>J</u>
RECEIVED BY:	DATE:	TIME:	
RELINQUISHED BY:	DATE:	TIME:	
RECEIVED BY:	DATE:	TIME:	



Report Date: January 18, 2005

Stephen Knüttel
SCS Engineers
3645 Westwind Blvd.
Santa Rosa, CA 95403

LABORATORY REPORT

Project Name: **Hessel Road** **01203317.00**

Lab Project Number: **5010508**

This 7 page report of analytical data has been reviewed and approved for release.

Mark A. Valentini, Ph.D.
Laboratory Director



TPH Gasoline in Water

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)
27646	DW-4615	TPH/Gasoline	ND	50

Date Sampled:	01/04/05	Date Analyzed:	1/11/05	QC Batch #:	5203
Date Received:	01/05/05	Method:	EPA 5030/8015M		



Volatile Hydrocarbons by GC/MS in Water

Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27646	DW-4615	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27646	DW-4615	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	ND	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	22.0	110	70 – 130
toluene-d ₈ (20)	19.0	95.0	70 – 130
4-bromofluorobenzene (20)	19.8	99.0	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/6/05	QC Batch #: 5204
Date Received: 01/05/05	Method: EPA 8260B	



LABORATORY

QUALITY ASSURANCE REPORT

QC Batch #: 5203

Lab Project #: 5010508

Sample ID	Compound	Result (ug/L)
MB	TPH/Gas	ND
MB	MTBE	ND
MB	Benzene	ND
MB	Toluene	ND
MB	Ethyl Benzene	ND
MB	Xylenes	ND

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.
27621	CMS	TPH/Gas		NS	
	CMS	Benzene	9.15	10.0	91.5
	CMS	Toluene	9.14	10.0	91.4
	CMS	Ethyl Benzene	9.58	10.0	95.8
	CMS	Xylenes	27.2	30.0	90.8

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.	RPD
27621	CMSD	TPH/Gas		NS		
	CMSD	Benzene	9.15	10.0	91.5	0.01
	CMSD	Toluene	9.14	10.0	91.4	0.01
	CMSD	Ethyl Benzene	9.58	10.0	95.8	0.69
	CMSD	Xylenes	27.2	30.0	92.5	1.9

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range; NR = No Recovery



QC Batch #: 5204

Lab Project #: 5010508

Sample ID	Compound Name	Result (ug/L)
MB	1,1-dichloroethene	ND
MB	benzene	ND
MB	trichloroethene	ND
MB	toluene	ND
MB	chlorobenzene	ND

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.0	105	70 – 130
toluene-d ₈ (20)	19.1	95.5	70 – 130
4-bromofluorobenzene (20)	19.7	98.5	70 – 130

Sample #	Sample ID	Compound Name	Result (ug/L)	Spike Level	% Recv.
27644	CMS	1,1-dichloroethene	25.3	25.0	101
	CMS	benzene	24.4	25.0	97.6
	CMS	trichloroethene	19.3	25.0	77.2
	CMS	toluene	22.9	25.0	91.6
	CMS	chlorobenzene	24.1	25.0	96.4

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.6	108	70 – 130
toluene-d ₈ (20)	19.2	96.0	70 – 130
4-bromofluorobenzene (20)	20.4	102	70 – 130



Sample #	Sample ID	Compound Name	Result (ug/L)	Spike Level	% Recv.	RPD
27644	CMSD	1,1-dichloroethene	28.0	25.0	112	10
	CMSD	benzene	24.9	25.0	99.6	2.0
	CMSD	trichloroethene	19.9	25.0	79.6	3.1
	CMSD	toluene	23.1	25.0	91.6	0.87
	CMSD	chlorobenzene	24.9	25.0	99.6	3.3

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	22.6	113	70 – 130
toluene-d ₈ (20)	18.7	93.5	70 – 130
4-bromofluorobenzene (20)	20.0	100	70 – 130

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range; NR = No Recovery



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(707) 769-3128



CLIENT INFORMATION

COMPANY NAME: SCS ENGINEERS	BILLING INFORMATION		
ADDRESS: 3645 WESTWIND BOULEVARD	CONTACT: John Reddick	COMPANY NAME: HESSEL ROAD	ADDRESS: Sebastopol CA 95472
SANTA ROSA, CA 95403	PHONE#: (707) 546-9461	PHONE#: (707) 544-5769	FAX #: (707) 544-5769

LAB PROJECT NUMBER: 50108

SCS ENGINEERS PROJECT NAME: Hessel Road	SCS ENGINEERS PROJECT NUMBER: 010317.00
TURNAROUND TIME (check one)	
SAME DAY	24 HOURS
48 HOURS	72 HOURS
5 DAYS	NORMAL X
COC	

ITEM	CLIENT SAMPLE I.D.	DATE SAMPLED	TIME	MATRIX	#	PRESV. YES/NO	COMMENTS	LAB SAMPLE #	ANALYSIS	
									TOTAL LEAD	5 LUFT METALS / CAM 17 METALS / 5 LUF METALS / PCBs / PCB-S
1	DH-4615	1/4	15:00	LQ	4	YES	X			27646
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										

RELINQUISHED BY: <i>Amy J. Guerley</i>	DATE: 1/5/05	TIME: 1141	SIGNATURE
RECEIVED BY:	DATE:	TIME:	RECEIVED BY LABORATORY:
RELINQUISHED BY:	DATE:	TIME:	
RECEIVED BY:	DATE:	TIME:	SIGNATURE



Report Date: January 18, 2005

Stephen Knüttel
SCS Engineers
3645 Westwind Blvd.
Santa Rosa, CA 95403

LABORATORY REPORT

Project Name: **Hessel Road** **01203317.00**

Lab Project Number: **5010509**

This 7 page report of analytical data has been reviewed and approved for release.

Mark A. Valentini, Ph.D.
Laboratory Director



TPH Gasoline in Water

Lab #	Sample ID	Analysis	Result (ug/L)	RDL (ug/L)	
27647	DW-3	TPH/Gasoline	ND	50	
Date Sampled:	01/04/05	Date Analyzed:	1/11/05	QC Batch #:	5203
Date Received:	01/05/05	Method:	EPA 5030/8015M		



Volatile Hydrocarbons by GC/MS in Water

Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27647	DW-3	dichlorodifluoromethane	ND	1.0
		chloromethane	ND	1.0
		vinyl chloride	ND	1.0
		chloroethane	ND	1.0
		bromomethane	ND	1.0
		trichlorofluoromethane	ND	1.0
		1,1-dichloroethene (1,1-DCE)	ND	1.0
		methylene chloride	ND	1.0
		trans-1,2-dichloroethene (trans-1,2-DCE)	ND	1.0
		1,1-dichloroethane (1,1-DCA)	ND	1.0
		cis-1,2-dichloroethene (cis-1,2-DCE)	ND	1.0
		2,2-dichloropropane	ND	1.0
		chloroform (THM1)	ND	1.0
		bromochloromethane	ND	1.0
		1,1,1-trichloroethane (TCA)	ND	1.0
		1,2-dichloroethane (EDC)	ND	1.0
		1,1-dichloropropene	ND	1.0
		carbon tetrachloride	ND	1.0
		benzene	ND	1.0
		trichloroethene (TCE)	ND	1.0
		1,2-dichloropropane (DCP)	ND	1.0
		dibromomethane	ND	1.0
		bromodichloromethane (THM2)	ND	1.0
		cis-1,3-dichloropropene	ND	1.0
		toluene	ND	1.0
		1,1,2-trichloroethane	ND	1.0
		1,3-dichloropropane	ND	1.0
		dibromochloromethane (THM3)	ND	1.0
		tetrachloroethene (PCE)	ND	1.0
		1,2-dibromoethane (EDB)	ND	1.0
		chlorobenzene	ND	1.0
		1,1,1,2-tetrachloroethane	ND	1.0
		ethyl benzene	ND	1.0
		m,p-xylene	ND	1.0
		styrene	ND	1.0
		o-xylene	ND	1.0
		bromoform (THM4)	ND	1.0
		1,1,2,2-tetrachloroethane	ND	1.0



Lab #	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
27647	DW-3	isopropyl benzene	ND	1.0
		1,2,3-trichloropropane	ND	1.0
		bromobenzene	ND	1.0
		n-propyl benzene	ND	1.0
		2-chlorotoluene	ND	1.0
		4-chlorotoluene	ND	1.0
		1,3,5-trimethylbenzene	ND	1.0
		tert-butylbenzene	ND	1.0
		1,2,4-trimethylbenzene	ND	1.0
		sec-butylbenzene	ND	1.0
		1,3-dichlorobenzene	ND	1.0
		1,4-dichlorobenzene	ND	1.0
		1,2-dichlorobenzene	ND	1.0
		p-isopropyltoluene	ND	1.0
		n-butylbenzene	ND	1.0
		1,2,4-trichlorobenzene	ND	1.0
		naphthalene	ND	1.0
		hexachlorobutadiene	ND	1.0
		1,2,3-trichlorobenzene	ND	1.0

Oxygenated Gasoline Additives

tert-butyl alcohol (TBA)	ND	25
methyl tert-butyl ether (MTBE)	ND	1.0
di-isopropyl ether (DIPE)	ND	1.0
ethyl tert-butyl ether (ETBE)	ND	1.0
tert-amyl methyl ether (TAME)	ND	1.0

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	22.7	114	70 – 130
toluene-d ₈ (20)	19.0	95.0	70 – 130
4-bromofluorobenzene (20)	19.8	99.0	70 – 130

Date Sampled: 01/04/05	Date Analyzed: 1/6/05	QC Batch #: 5204
Date Received: 01/05/05	Method: EPA 8260B	



LABORATORY

QUALITY ASSURANCE REPORT

QC Batch #: 5203

Lab Project #: 5010509

Sample ID	Compound	Result (ug/L)
MB	TPH/Gas	ND
MB	MTBE	ND
MB	Benzene	ND
MB	Toluene	ND
MB	Ethyl Benzene	ND
MB	Xylenes	ND

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.
27621	CMS	TPH/Gas		NS	
	CMS	Benzene	9.15	10.0	91.5
	CMS	Toluene	9.14	10.0	91.4
	CMS	Ethyl Benzene	9.58	10.0	95.8
	CMS	Xylenes	27.2	30.0	90.8

Sample #	Sample ID	Compound	Result (ug/L)	Spike Level	% Recv.	RPD
27621	CMSD	TPH/Gas		NS		
	CMSD	Benzene	9.15	10.0	91.5	0.01
	CMSD	Toluene	9.14	10.0	91.4	0.01
	CMSD	Ethyl Benzene	9.52	10.0	95.8	0.69
	CMSD	Xylenes	27.2	30.0	92.5	1.9

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range; NR = No Recovery



QC Batch #: 5204

Lab Project #: 5010509

Sample ID	Compound Name	Result (ug/L)
MB	1,1-dichloroethene	ND
MB	benzene	ND
MB	trichloroethene	ND
MB	toluene	ND
MB	chlorobenzene	ND

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.0	105	70 – 130
toluene-d ₈ (20)	19.1	95.5	70 – 130
4-bromofluorobenzene (20)	19.7	98.5	70 – 130

Sample #	Sample ID	Compound Name	Result (ug/L)	Spike Level	% Recv.
27644	CMS	1,1-dichloroethene	25.3	25.0	101
	CMS	benzene	24.4	25.0	97.6
	CMS	trichloroethene	19.3	25.0	77.2
	CMS	toluene	22.9	25.0	91.6
	CMS	chlorobenzene	24.1	25.0	96.4

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	21.6	108	70 – 130
toluene-d ₈ (20)	19.2	96.0	70 – 130
4-bromofluorobenzene (20)	20.4	102	70 – 130



Sample #	Sample ID	Compound Name	Result (ug/L)	Spike Level	% Recv.	RPD
27644	CMSD	1,1-dichloroethene	28.0	25.0	112	10
	CMSD	benzene	24.9	25.0	99.6	2.0
	CMSD	trichloroethene	19.9	25.0	79.6	3.1
	CMSD	toluene	23.1	25.0	91.6	0.87
	CMSD	chlorobenzene	24.9	25.0	99.6	3.3

Surrogates	Result (ug/L)	% Recovery	Acceptance Range (%)
dibromofluoromethane (20)	22.6	113	70 – 130
toluene-d ₈ (20)	18.7	93.5	70 – 130
4-bromofluorobenzene (20)	20.0	100	70 – 130

MB = Method Blank; LCS = Laboratory Control Sample; CMS = Client Matrix Spike; CMSD = Client Matrix Spike Duplicate
NS = Not Spiked; OR = Over Calibration Range; NR = No Recovery



Analytical Sciences

COPyCHAIN OF CUSTODY

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110 Liberty Street, Petaluma, CA 94952
(707) 769-3128



CLIENT INFORMATION

COMPANY NAME: SCS ENGINEERS	BILLING INFORMATION		
ADDRESS: 3645 WESTWIND BOULEVARD	CONTACT: John Riddle	SCS ENGINEERS PROJECT NAME: HESSEL ROAD	
SANTA ROSA, CA 95403	COMPANY NAME: Hessel Rd	SCS ENGINEERS PROJECT NUMBER: 0160331700	
CONTACT: Stephen Knott	ADDRESS: Sebastopol CA	TURNAROUND TIME (check one)	
PHONE#: (707) 546-9461	PHONE#: (707) 823-1976	SAME DAY	24 HOURS
FAX #: (707) 544-5769	FAX #:	48 HOURS	72 Hours

LAB PROJECT NUMBER: 35010309	SCS ENGINEERS PROJECT NAME: HESSEL ROAD
GLOBAL ID: 0160331700	SCS ENGINEERS PROJECT NUMBER: 0160331700
GEOTRACKER EDF: Y N	
COOLER TEMPERATURE	
COC	

ANALYSIS						
ITEM	CLIENT SAMPLE I.D.	DATE SAMPLED	TIME	MATRIX	#	PRESV. YESNO
1	DNA-3	1/4	20:55	Liq	4	YES
2						X
3						
4						
5						
6						
7						
8						
9						
10						
11						

SIGNATURES			
RELINQUISHED By: <i>John J. Knott</i>	DATE: 1/5/05	TIME: 1141	RECEIVED BY LABORATORY: <i>[Signature]</i>
RECEIVED By: _____	DATE: _____	TIME: _____	_____
RELINQUISHED By: _____	DATE: _____	TIME: _____	_____
RECEIVED By: _____	DATE: _____	TIME: _____	_____